

THE RELATIONSHIP OF VISUAL DEFECTS TO PERSONALITY  
DEVELOPMENT AND SCHOLASTIC ATTAINMENT

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A THESIS  
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C. O. W.

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## CHAPTER I

### INTRODUCTION

Statement of the Problem.- The problem is to ascertain the relationship between visual defects and personality development and between visual defects and scholastic attainment of the students of grades 4, 5, and 6 of Oglethorpe School, Atlanta, Georgia.

The Purposes of the Study.- The purposes of the study are the following:

1. To determine the incidence of visual defects, the stage of personality development, and the scholastic attainment of pupils in grades 4, 5, and 6.
2. To discover the relationship, if any, between visual defects and personality development.
3. To discover the relationship, if any, between visual defects and scholastic attainment.
4. To suggest methods and procedures for correcting visual defects of the types revealed in the study as techniques for improving personality development and scholastic ability.

Definitions.- In the study certain terms will be used frequently and it seems necessary to clarify the following:

The telebinocular. The telebinocular is an instrument designed to discover specific visual defects.<sup>1</sup>

There are many definitions for the term, personality, but the one used for this study is one proposed by Dashiell, as follows:<sup>2</sup>

Personality is the total picture of one's organized behavior, especially as it can be characterized by his fellow men in a consistent way.

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<sup>1</sup>George G. Deaver, Fundamentals of Physical Examination (Philadelphia, 1939), p. 129.

<sup>2</sup>John Frederick Dashiell, Fundamentals of General Psychology (New York, 1927), p. 579.

Health Education. Health education is the sum of all experiences which favorably influence habits, attitudes, and knowledge relating to individual, community and racial health.<sup>1</sup>

Visual Acuity. Visual acuity is the faculty which the eye possesses of perceiving the shape or form of objects.<sup>2</sup>

Ascendance. Ascendance is the personality characteristic of dominating.<sup>3</sup>

Submission. Submission is the characteristic of yielding.<sup>4</sup>

Introvert. An introvert is an individual who is strongly inclined to live within himself.

Extrovert. An extrovert is an individual whose interest is centered in external objects and actions.<sup>6</sup>

Method of Procedure.- The Normative-Survey Method was chosen as the method of research for this study. Data relative to visual acuity were collected by testing with the telebinocular, data relative to personality development were collected by the Pintner Aspects of Personality Test,<sup>7</sup>

<sup>1</sup>Report of the Committee on Terminology of Health Education, "Health Education," Journal of Health and Physical Education (Dec., 1934), p. 16.

<sup>2</sup>George G. Deaver, op. cit., p. 123.

<sup>3</sup>John Frederick Dashiell, op. cit., p. 586.

<sup>4</sup>Ibid.

<sup>5</sup>Floyd L. Ruch, Psychology and Life (New York, 1941), p. 463.

<sup>6</sup>Ibid.

<sup>7</sup>Rudolf Pintner et al., Pintner Aspects of Personality Test (New York, 1937).

and data relative to scholastic attainment were collected by the Progressive Achievement Test.<sup>1</sup> Then the types of difficulties were analyzed. Appropriate tables were made for test results including the mean, median and the standard deviation for the fourth, fifth, and sixth grades. Correlations were computed to find the relation between visual acuity and personality development and between visual acuity and scholastic attainment. These data were discussed in terms of the questions proposed and were presented by a combination of the narrative, tabular and graphical methods.

Description of the Tests.- Data relative to visual acuity were collected by testing with the telebinocular. The specific names for the telebinocular tests that were administered in the school are the Visual Sensation and Perception Tests of the Betts Ready to Read Unit. The telebinocular tests seemingly are more accurate and the results secured from such tests are more thorough than those of the Snellen Chart Test. Following are descriptions of the tests that go with the telebinocular:<sup>2</sup>

Test No. 1. Introduction. The purpose of this test is to introduce binocular vision in a very simple way.

Test No. 2. Visual Efficiency. This test is designed to test both eyes acting together as habitually and then the visual efficiency of each eye separately.

Test No. 3. Depth Perception. The purpose of this test is to measure the individual's level of depth perception.

Test No. 4. Vertical Imbalance. This test determines whether or not the eyes function in the proper horizontal plane.

<sup>1</sup>Ernest Tiegs and Willis Clark, Progressive Achievement Tests Elementary Battery, Form B (California, 1943).

<sup>2</sup>George G. Deaver, op.cit., pp. 129 - 141.



Test No. 5. Fusion at Distance. The purpose of this test indicates one's fusion power of small-sized images at distances beyond arm's reach.

Test No. 6. Lateral Imbalance. This test indicates the tendency of the two eyes to deviate from normal positions when looking at objects at a distance within arm's reach and when looking at objects beyond arm's reach.

Test No. 7. Distance Fusion. The purpose of this test is to test fusion ability at reading distance.

Test No. 8. Sharpness of Image at Near and Far Points. This test detects errors of focus of a degree sufficient to interfere with efficient vision and inefficiency when looking at objects beyond arm's reach.

The methods utilized for these tests were those suggested by George G. Deaver, who says:<sup>1</sup>

In order to effectively secure the best results for detecting visual defects, each of the eight tests must be given. The purpose of these tests is: To provide a speedy and precise method of determining how well prepared are an individual's eyes to do important daily tasks efficiently and safely. Failure to pass these simple tests indicates the need of a thorough eye examination.

Data relative to personality development were collected by administering the Pintner Aspects of Personality Test. Ascendance, submission, introversion, extroversion, and emotional stability were the personality traits measured in this test.

Data relative to scholastic attainment were secured from the Progressive Achievement Test administered in the school by the staff. The Progressive Achievement Test is a group diagnostic test battery including reading vocabulary, reading comprehension, arithmetic reasoning, arithmetic fundamentals, and language. It is a standardized test and is especially useful in indicating the extent of mastery and the difficulties of pupils in the fundamental skills. By means of nineteen sub-tests, outlines under the five tests mentioned some diagnostic analysis of the abilities of

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<sup>1</sup>George G. Deaver, op. cit., p. 131.

students in each of the grades is provided. The test situations are organized so that each pupil's strengths and weaknesses are readily apparent, and the test results are an immediate aid to the teacher in fitting instruction to the needs of her pupils.<sup>1</sup>

Importance of the Study.- The study is designed to show the possibility of correcting visual defects and thereby improving the status relative to personality development and scholastic attainment. There are numerous definitions of personality and in each there is an understanding that personality includes one's health conditions. Seemingly, there is a close relationship between one's health status and personality development.

It has also been felt that reading difficulties can often be attributed to visual defects. Rogers<sup>2</sup> says that the vision of the school child is of the utmost importance, and the stating of such truism should seem unnecessary. The strenuous use of the eyes of the pupils in reading, writing, etc., is emphasized in teacher training and in practice before the question of their fitness for this use is looked into.

Related Literature.- There have been several studies in connection with the study of visual defects by the Snellen Chart and only a few such studies made with the telebinocular. Following are some of the studies made by outstanding authorities in the vision field.

<sup>1</sup>Ernest Tiegs and Willis Clark, Catalogue of Standardized Tests (California, 1946), p. 7.

<sup>2</sup>James Frederick Rogers, What Every Teacher Should Know About the Physical Conditions of Her Pupils (Washington, D. C., 1936), p. 7.

Dorothy B. Nyswander<sup>1</sup> tested 591 students in six different grades in New York and found the following:

Of 591 children in six different grades, 79 were found whose records showed the date when visual acuity defects had first been determined by the Snellen Test and when glasses had been obtained. These records were inspected to determine (1) who made the initial detection of visual defects, (2) how much time intervened between the first detection and the correction, and (3) what efforts were made by the nurse to secure correction were recorded. Each child was interviewed to find out how many children owning glasses were not wearing them.

The diagnosis and treatment of pathologic conditions of the eyes are the physicians responsibility, but the testing procedure, which may locate abnormal functioning, and the recognition of pathologic lesions can be performed by trained teachers.<sup>2</sup>

The report on the Keystone ophthalmic telebinocular by Miriam Foster, research assistant in Massachusetts's Department of Public Health, indicates its usefulness in the schools.<sup>3</sup> Examining approximately 100 children in the upper six grades, he found that among these children referred to the eye specialist and found by him to have serious defects, there was none whose record on the Snellen Tests indicated a need for such examination.

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<sup>1</sup>Dorothy B. Nyswander, Solving School Health Problems (New York, 1942), pp. 155 - 156.

<sup>2</sup>George G. Deaver, op. cit., pp. 121 - 122.

<sup>3</sup>L. J. O'Rourke, "Visual Defects of School Children," The Commonwealth (July, August, September), p. 67.

A preliminary report of the Advisory Committee on Teacher Education in New York revealed the following:<sup>1</sup>

An objective test on the eye health of school children given to 1,200 senior students in 20 institutions preparing teachers reveals that less than half the students have fundamental information on eye health needed by the teacher.

The Advisory Committee on Teacher Education in New York also found the following:<sup>2</sup>

An inquiry regarding the curriculum offerings in eye health was sent to 62 universities. Forty-two responded. Of these, one-third reported no offerings, one-third offered one unit, and the remaining third offered two or more units in eye health. In the last group, eight universities devoted more than two semester hours to this subject.

Schools should cooperate more in regards to the eye health program. It is indeed a subject that will decrease many problems in the classroom. Wells<sup>3</sup> believes that when the facts are known, it is quite possible that visual tests will not stop with measuring the acuity of each eye and testing the color sense, but that a certain standard of stereopsis (depth perception) will be required. Wells<sup>4</sup> also believes that the power of fusion is largely a product of motivation.

<sup>1</sup> Preliminary Report of the Advisory Committee on Teacher Education, Eye Health in Teacher Education (New York, 1944), pp. 5 - 6.

<sup>2</sup> Ibid.

<sup>3</sup> David W. Wells, The Stereoscope in Ophthalmology (Boston, 1928), p. 86.

<sup>4</sup> Ibid.

Betts reports on a study made by Dearborn and Comfort<sup>1</sup> of the Department of Educational Psychology of Harvard University;

In 1932, an instrument for measuring differences of size and shape of ocular images (aniseikonia) was designed for the Department of Educational Psychology of the Graduate School of Harvard University. Recently, Dearborn and Comfort made a report, without establishing definite conclusions of the study of 164 cases. Their investigation is pertinent because 117 of the cases had specific learning disabilities, 78 per cent of whom had a significant amount of size differences. They found, as investigators on other phases of reading disabilities have concluded, that it is not so much the degree of the defect, as it is the degree of counterpoise of the individual in compensating for the defect, that determines the amount of distress that is caused.

Many studies have been made with the Keystone telebinocular tests. Using the fusion slide of the telebinocular test, Betts<sup>2</sup> tested 194 first-grade entrants. Thirteen per cent could not fuse the small targets at the distance equivalent of forty inches; 13.7 per cent of the pupils could not co-ordinate their eyes for fusion of the target at reading distance. Although the coordinated action of the two eyes is only one mechanical factor contributing to efficient and rapid reading, fusion difficulties should be corrected by eye-specialists as a part of any prevention and correction school health program.

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<sup>1</sup>Emmett A. Betts, "Reading Disabilities and Their Correction: National Conference of Research in Elementary English," Elementary English Review XII (March, April, May, June, 1935), pp. 69-73; 131-141; 157-165;

<sup>2</sup>Ibid.

In checking the results of the Snellen Chart test over against the telebinocular test at Ohio University in 1934, the following was found: Checking the results of the Snellen Chart Test against the telebinocular test, Betts<sup>1</sup> has found that only 5 to 40 per cent (varying with the examiner and the school population of the children) are identified who need the help of an eye-specialist. The chief visual factors contributing to school failures are not identified by the Snellen Chart.

An analysis of the limitations of the Snellen Chart Test for the diagnosis of reading difficulty shows: (1) The test does not appraise the efficiency of the eyes at reading distance. (2) The test does not appraise the coordination of the two eyes. (3) The test provides not even a crude index to the degree of farsightedness. (4) The test is not critical in detecting astigmatism because an individual can with conscious effort force his eyes to small enough type to pass the test even though his refractive error is such as to make sustained reading difficult and uncomfortable.

Poor vision is caused by numerous factors and in many instances directs an individual's habits and progress. In England, in a report made by the Committee of Inquiry into Problems Connected with Defective Vision in School Children<sup>2</sup>, the following was found: A recent study of 2,625 children between the ages of one and fifteen years, revealed 2 to 10 per cent free from refractive errors, depending on the age. Myopia (nearsightedness) was rare in children under five years but was found to increase from 2 to 5.5

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<sup>1</sup> Emmett A. Betts, op. cit.

<sup>2</sup> Report of Committee of Inquiry Into Problems Connected with Defective Vision in School Children, "Defective Vision," (London, England, 1931), p. 19.

per cent between the eight and fifteenth year. Farsightedness decreased with the advance in age.

Summary.— It has already been indicated that headaches, nervousness, and various abnormalities may be the result of impaired vision. It is realized that reading difficulties may arise from limited intelligence and that they very often arise from psychoeducational difficulties, including unhappy, emotional experiences, the development of undesirable attitudes, faulty eye movement, or the tendency to reverse letter and word forms. On the other hand, reading difficulties may, and often do, result from unusual defects. Certainly, when a retarded child with inability to concentrate, inattentiveness, restlessness, and lack of interest in his work is discovered, one should make sure that he is free from both visual and auditory defects before one assumes that he is dull.

C. E. Turner<sup>1</sup> summarizes the relation of visual defects to personality development and scholastic achievement as follows:

In the interest of the health of the child and the educational progress of the class, the teachers need to detect possible difficulties and secure a thorough examination when there is suspicion of trouble. Her encouragement is often needed to persuade parents to secure glasses for the child. She may need to combat the groundless superstition that wearing glasses in childhood weakens the eyes. When glasses have been secured, she needs to see that the child wears them regularly. The myopic child may need her supervision to avoid overuse of the eyes or her help in being placed in a special class. The maintenance of good lighting in the classroom and the best possible seating of children with visual difficulties are also teacher responsibilities. In doing these things, the teacher is making health education direct, personal, and applied.

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<sup>1</sup>C. E. Turner, Principles of Health Education (New York, 1939), pp. 115-116.

## CHAPTER II

### PRESENTATION AND INTERPRETATION OF DATA

Visual Acuity.- In securing information relative to visual acuity, the writer administered the eight tests of the telebinocular group. Anyone failing to pass these tests needs the attention of an eye physician. Scores ranging from 0 to 50 in this test mean undesirable vision, from 51 to 74 is an average or normal score and from 75 up is an excellent score in vision. The norm for the telebinocular test is 50.

The telebinocular tests were administered to twenty-one, fourth-grade students. The range of the scores was between 16.2 and 95.5. The arithmetic mean was 57.5, meaning that the fourth grade made 7.5 points above the norm for visual acuity. Fifty per cent of the cases were above 58.55, the median, and fifty per cent below. Data relative to visual acuity for grade four may be seen in Table 1.

The telebinocular tests for visual acuity were administered to twenty-two, fifth grade students. The range of the scores was between 54.1 and 91.4 and the median score was 73. The arithmetic mean was 71.3, meaning that the average score was 21.3 above the norm for the fifth grade in visual acuity. Data relative to visual acuity for grade five may be seen in Table 1.

Twenty-six, sixth grade students took the test in visual acuity. The range of the scores was between 29.4 and 95.5. Fifty per cent of the students made scores above 67.4, the median, and fifty per cent were below. An arithmetic mean of 69.8 denotes that grade six was 19.8 above the norm in visual acuity. A total picture in visual acuity for grade six may be seen in Table 1.



Comparison of Grades 4, 5, and 6 in Visual Acuity.-- Of the three grades, grade four had the widest range of the scores, which was from 16.2 to 95.5 and grade five had the closest range which was from 54.1 to 91.4. The fact that the fourth grade had such a wide range is its scores is that one student is practically blind. Grade four was 7.5 points above the norm; grade five, 21.3 points above the norm; and grade six, 19.8 above the norm. It can be said that each grade had an average score above the norm in visual acuity. Grade four had a median score of 58.55; grade five, 73; and grade six, 67.4. These data seem to indicate that of the three grades, grade five excelled in visual acuity. In other words, grade five had better visual acuity than grades four and six. Table 1 shows the comparison of scores for the three grades in visual acuity and Figure 1 shows a comparison of grades 4, 5, and 6 with the norm in visual acuity. Scores for students in visual acuity for the three grades are shown in Tables 4, 5, and 6.

TABLE I  
COMPARISON OF GRADES 4, 5, AND 6 IN VISUAL ACUITY

	Grade 4	Grade 5	Grade 6
No. of students	22	22	26
Range of scores	16.2 - 95.5	54.1 - 91.4	29.4 - 95.5
Median	58.55	73	67.4
Mean	57.5	71.3	69.8
Standard deviation	18.3	11	15.8

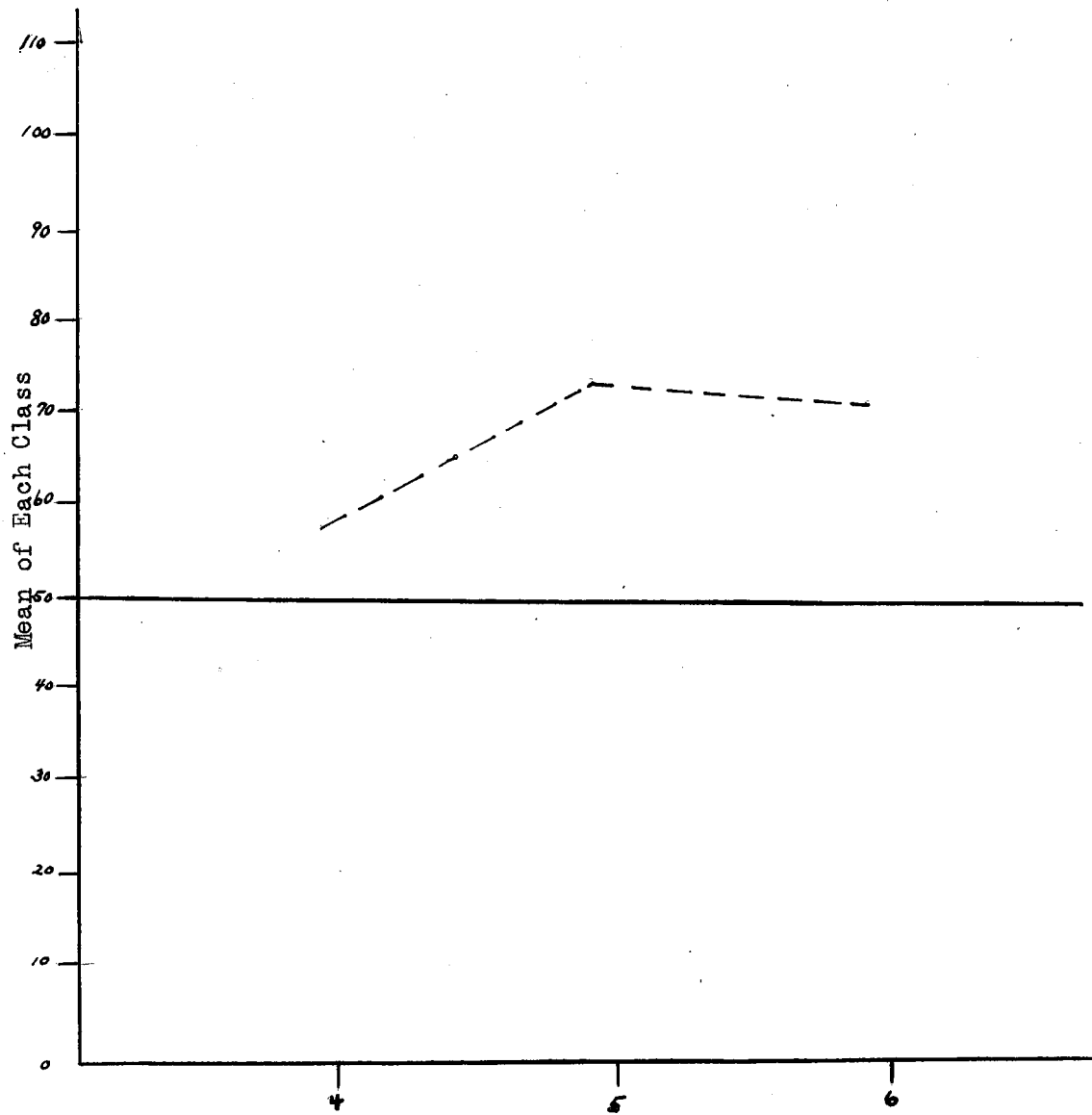


Figure 1. Comparison of Grades 4, 5, and 6 in Visual Acuity with the Norm.

--- Class Mean  
— Norm

Personality Development.- The Pintner Aspect of Personality Test<sup>1</sup> was administered to the fourth, fifth, and sixth grades of Oglethorpe School. Ascendance, submission, introversion, extroversion and emotional stability were the traits measured by this test. The uses of this test may be as follows:<sup>2</sup>

1. To indicate to the teacher the status of her pupil's in each of three aspects of personality.
2. To aid in educational and vocational guidance.
3. To furnish a basis for recommending psychiatric advice.
4. To use as a guide in psychiatric interview.
5. To use in survey purposes.
6. To use in research purpose.

According to the manual of directions of the personality test,<sup>3</sup> a score of 50 or below on this test indicates that the child is having personality difficulties and special attention is to be given the student. A low score on the test indicates that the child is of the slow, submissive type. He is a child that is more than likely an introvert and is emotionally unbalanced.

Twenty-four, fourth grade students took the personality test. The range of the scores was between 50 and 90. No student in the fourth grade made a score below the norm in personality. Fifty per cent of the scores were above 64, the median, and fifty per cent below. The arithmetic mean

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<sup>1</sup> Rudolf Pintner et al., op. cit.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

for the class was 65.6, which is 15.6 points above the norm. The results of the scores for grade four in personality development are shown in Table 2.

There were twenty-one, fifth grade students to take this test. The range of the scores was between 43 and 81. One student made below the norm in personality which was 43. The median for these scores was 65. The arithmetic mean, 64.3, indicates that the fifth grade was 14.3 points above the norm in personality. Data relative to personality development in grade five may be seen in Table 2.

This personality test was administered to twenty-six, sixth grade students. The range of the scores was between 38 and 79. Five students made scores below the norm. Fifty per cent of the students made scores above 59, the median, and fifty per cent below. The arithmetic mean, 58.8, indicates that the sixth grade was 8.8 above the norm in personality development. A total picture of the sixth grade in personality development is shown in Table 2.

Comparison of Grades 4, 5, and 6 in Personality Development.- No student in grade four made a score below the norm in personality; one student made below the norm in grade five and five students made below the norm in grade six. The mean score for personality development in grade four was 65.6; for grade five, 64.3; grade six, 58.8. The standard deviation for grade four was 9.4; grade five, 5.4; grade six, 9.4. Grades four and six had wider ranges in scores than grade five. These facts seem to indicate that grades four, five and six had averages above the norm for personality development. Nevertheless, fewer personality difficulties appeared in

grade four. A picture of the results of scores for the three grades is shown in Table 2 and a picture of the results of the three grades as compared with the norm in personality development may be seen in Figure 2. Scores of the students for personality development in the three grades are shown in Tables 4, 5, and 6.

TABLE 2

## COMPARISON OF GRADES 4, 5, AND 6 IN PERSONALITY DEVELOPMENT

	Grade 4	Grade 5	Grade 6
No. of students	25	21	26
Range of scores	50 - 90	43 - 81	38 - 79
Median	64	65	59
Mean	65.6	64.3	58.8
Standard deviation	9.4	5.4	9.4

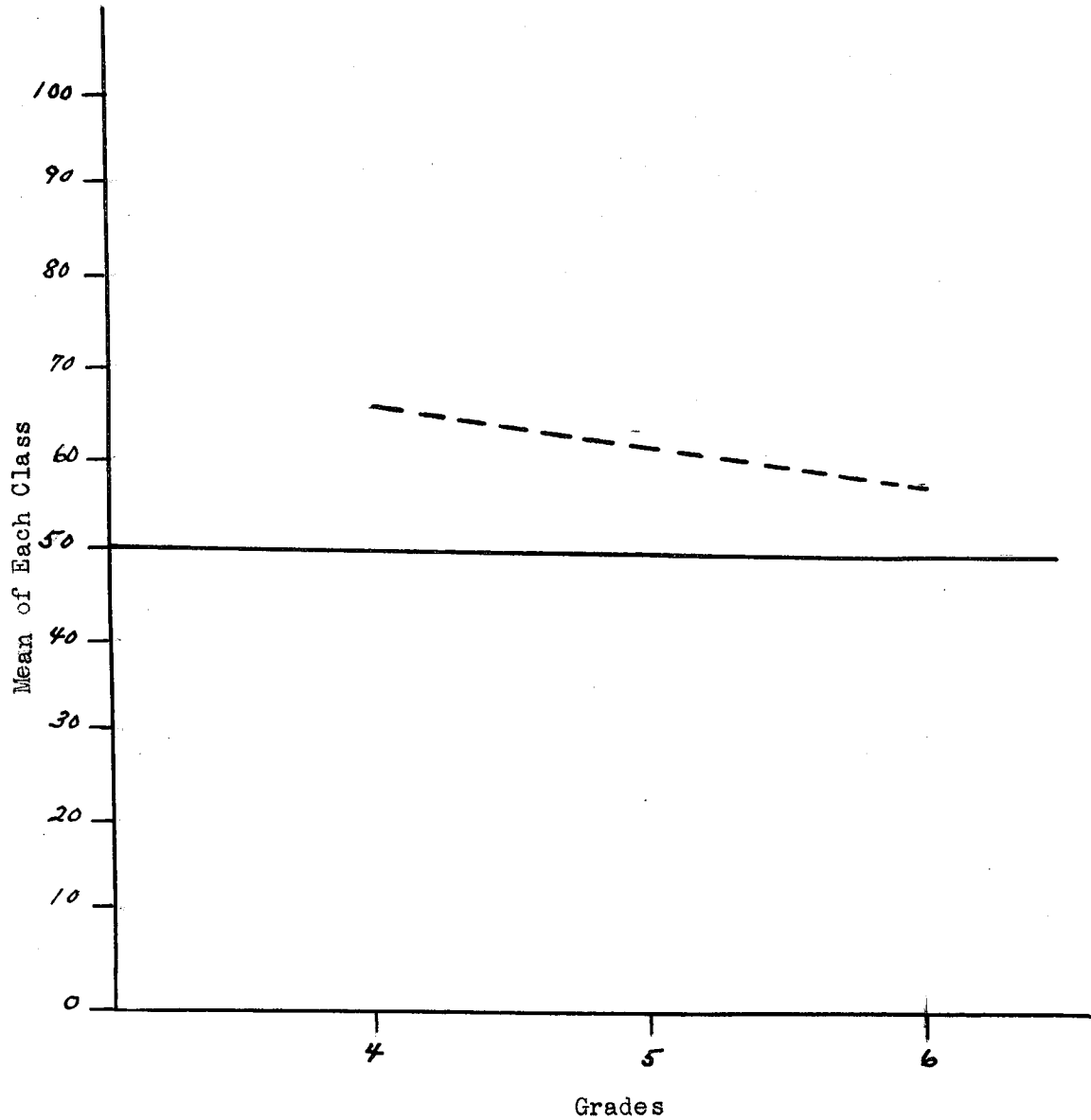


Figure 2. Comparison of Grades 4, 5, and 6 in Personality Development with the Norm.

--- Class Mean

— Norm

Progressive Achievement Test.- The Progressive Achievement Test was administered by the staff on May 23, 1946. This test includes reading vocabulary, reading comprehension, arithmetic reasoning, arithmetic fundamentals and language. The results of this test may be utilized by the teacher in fitting instruction to the needs of her students. The norm varies for each class: For grade four, the norm is from 165-169; for grade five, 215-219 and grade six, 263-266. Since the test was given during the ninth month of school and the students were ready for promotion, the norm used for each grade was that given for nine months in the respective grade.

The Progressive Achievement Test was administered to twenty-one, fourth grade students. The range of the scores was between 54 and 235. The score of 54 represents the average achievement as expected of students between the second and third grades and the score of 235 represents the ability of students between the sixth and seventh grades. The median score was 146 and the mean score was 152.31 which is 12.69 points below the norm for grade four. The results of the scores for scholastic attainment for grade four may be found in Table 3.

Eighteen, fifth grade students were given this test. The range of the scores was between 136 and 250. The median score was 183 and the mean score of the class was 192.7 which is 22.3 points below the norm for grade five. A picture of the results of the scores for scholastic attainment for grade five is shown in Table 3.

Twenty-seven, sixth grade students were given this test. The range of the scores was between 54 and 311. The median score was 210. The score of 54 represents the average achievement of students between the second and



third grades and the score of 311 represents the average achievement of students between the eighth and ninth grades. These two extremes caused a wide range in the scores. The mean score, 204, was 59 points below the norm for the sixth grade. Data relative to scholastic attainment for grade six are presented in Table 3.

Comparison of Scholastic Attainment for Grades 4, 5, and 6.- Grades four, five and six should have made mean scores as that of students in grades 4.9, 5.9, and 6.9. This should have been so because the examination was given at the time of promotion at the end of the school year. The mean score for grade four was 152.31, which is 12.69 points below the norm for the fourth grade and is the scholastic achievement expected of students in grade 4.6. The mean score for grade five was 192.7, which was 22.3 points below the norm for grade five, and is a grade placement of grade 5.4; the mean score for grade six was 204 which is 59 points below the norm for the class and a grade placement of 5.6. A few students (one in some cases) making such low scores brought the class norm below average. A comparison of grades 4, 5, and 6 in scholastic attainment is shown in Table 3. A picture of the average of the three grades is shown in Figure 3 and scores of students in the scholastic attainment test are shown in Tables 4, 5, and 6 for the three grades respectively.

TABLE 3

## COMPARISON OF GRADES 4, 5, AND 6 IN SCHOLASTIC ATTAINMENT

	Grade 4	Grade 5	Grade 6
No. of students	21	18	27
Range of scores	54 - 235	136 - 250	54 - 311
Median	146	183	210
Mean	152.31	192.7	204
Grade equivalent of mean	4.6	5.4	5.6
Standard deviation	40.7	34.5	60.8

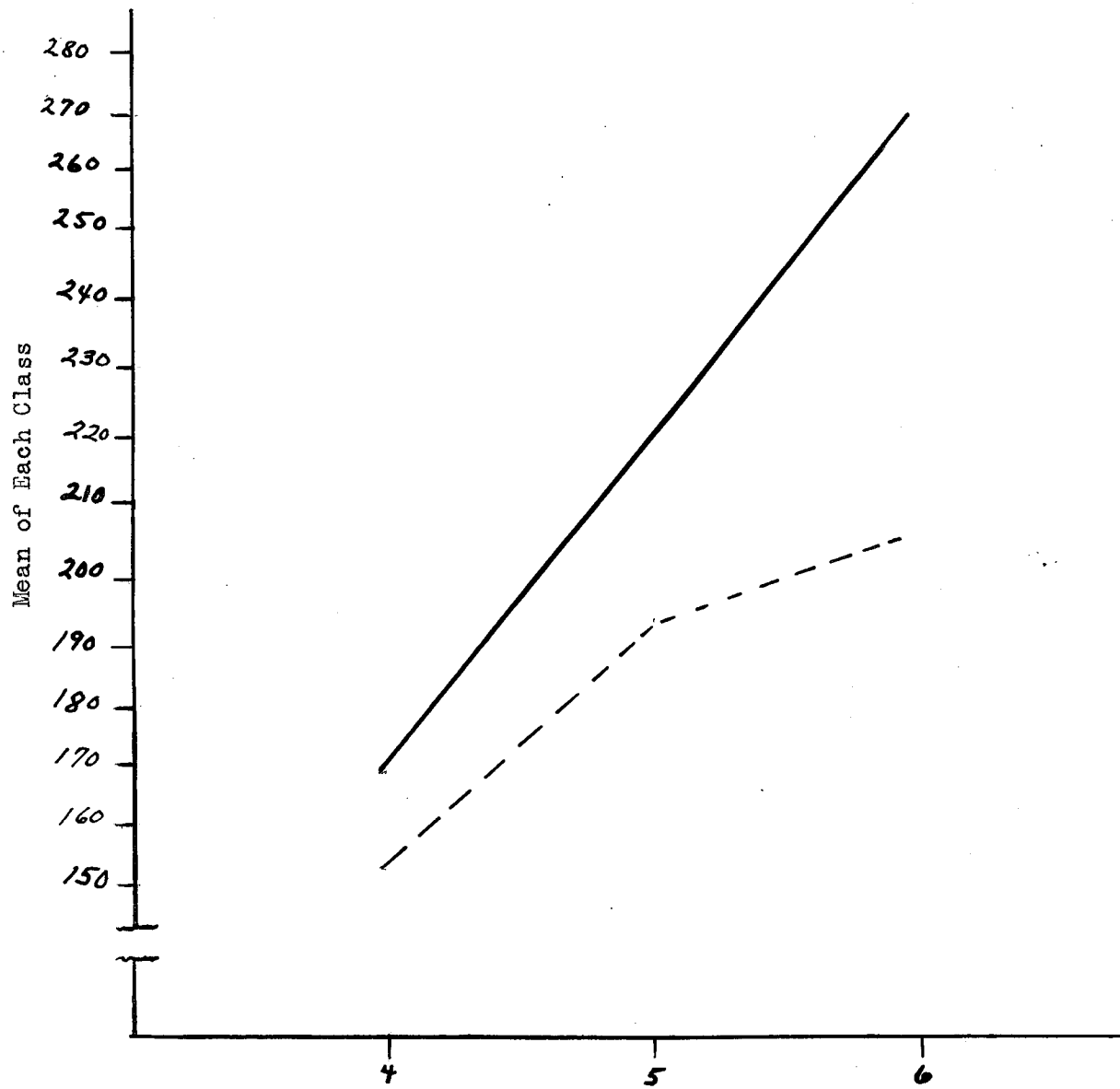


Figure 3. Comparison of Grades 4, 5, and 6 in Scholastic Attainment with the Norm.

--- Class Mean

— Norm

TABLE 4

A COMPARISON OF THE SCORES OF THE FOURTH GRADE STUDENTS IN VISUAL  
ACUITY, PERSONALITY DEVELOPMENT AND SCHOLASTIC ATTAINMENT  
1946

STUDENTS	TEST RESULTS		
	VISUAL ACUITY	PERSONALITY DEVELOPMENT	SCHOLASTIC ATTAINMENT
A	54.2	63	113
B	91	61	143
C	--	68	101
D	66.8	78	160
E	58.5	58	108
F	66.8	50	54
G	33.3	74	186
H	62.7	73	171
I	16.2	90	171
J	29.4	53	---
K	46.7	63	---
L	50.2	72	146
M	66.8	84	137
N	---	61	153
O	---	58	128
P	58.6	67	---
Q	61.5	79	202
R	48.5	59	147
S	95.5	78	196
T	41.8	67	122
U	62.7	50	194
V	83.2	67	196
W	62.7	63	136
X	50.4	68	235
Y	58.5	56	---
Arithmetic Mean	57.5	65.6	152.31
Standard Deviation	18.3	9.4	40.7
Median	58.55	64	146

TABLE 5

A COMPARISON OF THE SCORES OF THE FIFTH GRADE STUDENTS IN VISUAL  
ACUITY, PERSONALITY DEVELOPMENT AND SCHOLASTIC ATTAINMENT  
1946

STUDENTS	TEST RESULTS		
	VISUAL ACUITY	PERSONALITY DEVELOPMENT	SCHOLASTIC ATTAINMENT
Z	58.7	60	184
AB	75	63	---
AC	71	65	136
AD	87.3	69	176
AE	75	64	218
AF	91.4	70	234
AG	87.3	52	221
AH	---	--	---
AI	58.6	--	---
AJ	62.7	59	229
AK	54.7	58	173
AL	54.2	65	---
AM	54.1	64	---
AN	75	72	182
AO	66.6	64	142
AP	79.1	64	180
AQ	75	70	238
AR	87.3	66	212
AS	63.9	68	150
AT	75	81	250
AU	70.9	67	162
AV	75	43	220
Arithmetic Mean	71.3	64.3	192.7
Standard Deviation	11	5.4	34.5
Median	73	65	183

TABLE 6

A COMPARISON OF THE SCORES OF THE SIXTH GRADE STUDENTS IN VISUAL  
ACUITY, PERSONALITY DEVELOPMENT AND SCHOLASTIC ATTAINMENT  
1946

STUDENTS	TEST RESULTS		
	VISUAL ACUITY	PERSONALITY DEVELOPMENT	SCHOLASTIC ATTAINMENT
AW	91.4	61	144
AX	61.5	44	174
AY	66.6	56	235
AZ	91.4	63	222
BC	95.5	71	311
BD	91.4	54	264
BE	91.4	60	272
BF	67.4	58	163
BG	87.3	66	180
BH	91.4	62	173
BI	58.3	56	210
BJ	45.8	49	54
BK	75	53	262
BL	66.6	65	165
BM	79.1	79	241
BN	45.8	43	90
BO	67.4	65	208
BP	75	69	280
BQ	54.2	56	145
BR	62.7	64	174
BS	50	--	276
BT	75	57	249
BU	54.2	38	137
BV	29.4	49	153
BW	--	68	263
BX	65.7	58	235
BY	75	66	228
Arithmetic Mean	69.8	58.8	204
Standard Deviation	15.8	9.4	60.8
Median	67.4	59	210

The Relationship Between Visual Acuity and Personality Development and Between Visual Acuity and Scholastic Attainment.- Scores in visual acuity were correlated with scores in personality development and it was found that the correlation between these two traits, visual acuity and personality development, was positive 0.1. Garrett says that when there is a correlation from 0 to  $\pm 0.20$  there is an indifferent or negligible relationship.<sup>1</sup> When one atypical student in the group examined, who made an unusually low score on visual acuity and a high score on personality development was excluded, the relationship improved as shown by the fact that the correlation between visual acuity and personality development rose from 0.1 to 0.29. This low correlation between visual acuity and personality indicates the high degree of uncertainty with which one can predict one of these traits from a knowledge of the other.

Scores in visual acuity were correlated with scores in scholastic attainment and it was found that the correlation between these two traits, visual acuity and scholastic attainment, was positive 0.43. Garrett<sup>2</sup> also states that any correlation between  $\pm 0.40$  and  $\pm 0.70$  denotes substantial relationship. Therefore, these data indicate a marked or substantial relationship between visual acuity and scholastic attainment.

As a result it can be said that there is a better relationship between visual acuity and scholastic attainment than between visual acuity and personality development. The fact that the correlation for

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<sup>1</sup>Henry E. Garrett, Statistics in Psychology and Education (New York, 1938), p. 332.

<sup>2</sup>  
Ibid.

visual acuity and scholastic attainment is 0.43 indicates that as visual acuity improves, so also does the scholastic attainment.



### CHAPTER III

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary.- The problem of this study was to ascertain the relationship between visual defects and personality development and between visual defects and scholastic attainment of the students of grades 4, 5, and 6 of Oglethorpe School, Atlanta, Georgia.

The purposes of the study were: (1) To determine the incidence of visual defects, the degree of personality development and the scholastic attainment of pupils in grades 4, 5, and 6. (2) To determine the relationship between visual defects and personality development. (3) To determine the relationship between visual defects and scholastic attainment. (4) To give methods and procedures for correcting visual defects.

The Normative-Survey Method was used as the method of research for this study. Data relative to visual acuity were collected by testing with the telebinocular; data relative to personality development were collected by the Pintner Aspects of Personality Test; and data relative to scholastic attainment were collected by the Progressive Achievement Test administered in the school by the staff. Then, the types of difficulties in visual acuity, personality development, and scholastic attainment were analyzed. Appropriate tables were made for test results including the mean, median, and the standard deviation. Correlations were computed to find the relationship between visual defects and personality development and between visual defects and scholastic attainment. These data were discussed in terms of questions proposed and were presented by a combination of the narrative, graphical, and tabular methods.

Conclusions.- Data relative to visual acuity were collected by testing with the telebinocular. As a result of the test of visual acuity, grade four had a mean score of 57.5; grade five, 71.3; and grade six, 69.8. Each of the three grades had a mean score above the norm which is 50. The mean score for the three grades together was 66.34. The frequency distribution of the telebinocular tests for visual acuity of the three grades is shown in Table 7 in the Appendix.

The Pintner Aspects of Personality Test was administered for data on personality development. As a result of this test, grade four had a mean score of 65.6; grade five, 64.3; and grade six, 58.8. When the three grades were grouped together, the mean was 62.42. Each of the three grades made mean scores above the norm which is 50. The frequency distribution of personality development of the three grades is shown in Table 8 in the Appendix.

The Progressive Achievement Test was administered in the school by the staff for data relative to scholastic attainment. The norm for this test varies for each class, for grade four, the norm was from 165-169; for grade five, 215-219; and grade six, 263-266. Grade four had a mean score of 152.31; grade five, 192.7; and grade six, 204. The mean for the three grades, grouped together, was 185.15. Each of the three grades made scores below the norm in scholastic attainment. Table 9 in the Appendix shows the frequency distribution of scholastic attainment for the three grades together.

It was found that the correlation between visual acuity and personality development was positive 0.1 which is an indifferent and negligible relationship. In conclusion from the data found (visual acuity and

personality development) one cannot predict to an appreciable extent the student's personality traits from a knowledge of his visual acuity.

The correlation between visual acuity and scholastic attainment was positive 0.43 which is a substantial and marked relationship. There was better relationship between visual acuity and scholastic attainment than between visual acuity and personality development. The fact that the correlation for visual acuity and scholastic attainment is 0.43 indicates that as visual acuity improves, so also does the scholastic attainment.

Recommendations.- The following are methods and procedures for correcting visual defects of the types revealed in this study as techniques for improving scholastic ability.

1. Cooperation should exist between the home and the school. The parents of those students whose vision proved undesirable by the telebinocular tests should be sent letters similiar to the following:

Dear Mr. and Mrs. \_\_\_\_\_:

This is to inform you that your child had the telebinocular visual acuity test on May 23, 1946. The purpose of these tests is to provide a speedy and precise method of determining how well prepared are an individual's eyes to do important daily tasks efficiently and safely. Failure to pass these simple tests indicates the need of a thorough eye examination.

\_\_\_\_\_ had undesirable results on the tests and I wish to have a conference with you about her. I will be available Mondays through Fridays from 1:00 P. M. to 3:00 P. M. for conferences.

Sincerely yours,

Oglethorpe School

2. The teachers should continue to test for visual defects.

Visual acuity is an important phase of the health program. Many classroom teachers can easily detect the students in their classes who have visual defects. Defective vision is often reflected by some abnormality of behavior as when the child:<sup>1</sup>

- a. Attempts to brush away blurs.
- b. Blinks continually when reading.
- c. Cries frequently.
- d. Has fits of temper.
- e. Holds the book far away from the face when reading.
- f. Holds the book close to eyes when reading, or keeps face close to page.
- g. Holds body tense when looking at distant objects.
- h. Is inattentive during class discussion of field trip or visit to museums.
- i. Is inattentive during wall-chart, map or blackboard lessons.
- j. Is inattentive during reading lesson.
- k. Is irritable over work.
- l. Reads but brief period without stopping.
- m. Reads when he should be at play.
- n. Rubs eyes frequently.
- o. Screws up face when looking at distant objects.
- p. Screws up face when reading.
- q. Shuts one eye when reading or covers one when reading.

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<sup>1</sup>Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Conserving the Sight of School Children Pub. 6 (New York, 1935).

The classroom teacher can use these suggestions as detecting visual difficulties. These characteristics should not be thought of as always being the cause of defective vision, but the majority of such cases usually need the attention of an eye physician.

3. Ideally, besides receiving cooperation from the home, the school must do its share in preventing and correcting defects. The school should have a school nurse, whose function should be to follow-up the children who had visual defects in order to urge parents to have the defects corrected, and if necessary, to arrange for having it done.

4. There should be some type of eye program in the school. The schools should make an effort to have a vision program. The vision program would keep permanent records of each child's school eye tests as well as records of the follow-up conferences. In the event a child needs help with visual problems, conferences should be made between the parent and eye examiner. The school in some way should stress the significance of the biological facts related to visual acuity, eye coordination and facts pertaining to the eyes should be included in the curriculum.

5. The following equipment of the school should be checked:

Lighting. There should always be correct lighting in the schools. Lights should not make a glare in the student's face and there should be a sufficient amount of lighting distributed properly and evenly in the classroom.

Seating. Poor vision may often result from improper seating of the students. The teachers should always note to see if the seats are adjusted according to the size of the student. Seats that can be hampered with

and adjustable are preferable over stationary seats. The seats should be placed with the best lighting situation present possible.

The writer thinks that the methods and procedures mentioned will correct visual defects which in turn will improve scholastic attainment. Cooperation must exist between the home and the school for the ideal situation to exist.

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## APPENDIX

TABLE 7

FREQUENCY DISTRIBUTION OF THE TELEBINOCULAR TESTS FOR VISUAL ACUITY  
OF FOURTH, FIFTH, AND SIXTH GRADE STUDENTS  
1946

CLASS	FREQUENCY
95 - 99 . . . . .	2
90 - 94 . . . . .	7
85 - 89 . . . . .	4
80 - 84 . . . . .	1
75 - 79 . . . . .	12
70 - 74 . . . . .	2
65 - 69 . . . . .	9
60 - 64 . . . . .	8
55 - 59 . . . . .	6
50 - 54 . . . . .	9
45 - 49 . . . . .	4
40 - 44 . . . . .	1
35 - 39 . . . . .	0
30 - 34 . . . . .	1
25 - 29 . . . . .	2
20 - 24 . . . . .	0
15 - 19 . . . . .	1

N = 69

Med. = 65.89

M. = 66.34

SD. = 17.53

TABLE 8

FREQUENCY DISTRIBUTION OF PERSONALITY DEVELOPMENT OF FOURTH, FIFTH,  
AND SIXTH GRADE STUDENTS  
1946

CLASS	FREQUENCY
90 - 94 . . . . .	1
85 - 89 . . . . .	0
80 - 84 . . . . .	1
75 - 79 . . . . .	4
70 - 74 . . . . .	7
65 - 69 . . . . .	17
60 - 64 . . . . .	17
55 - 59 . . . . .	12
50 - 54 . . . . .	6
45 - 49 . . . . .	2
40 - 44 . . . . .	3
35 - 39 . . . . .	1
N- = 71	
Med. = 62.88	M. = 62.42 SD. = 9.05

TABLE 9

FREQUENCY DISTRIBUTION OF SCHOLASTIC ATTAINMENT OF FOURTH, FIFTH,  
AND SIXTH GRADE STUDENTS  
1946

CLASS	FREQUENCY
300 - 314 . . . . .	1
285 - 299 . . . . .	0
270 - 284 . . . . .	3
255 - 269 . . . . .	3
240 - 254 . . . . .	3
225 - 239 . . . . .	7
210 - 224 . . . . .	6
195 - 209 . . . . .	4
180 - 194 . . . . .	6
165 - 179 . . . . .	8
150 - 164 . . . . .	6
135 - 149 . . . . .	10
120 - 134 . . . . .	2
105 - 119 . . . . .	2
90 - 104 . . . . .	2
75 - 89 . . . . .	0
60 - 74 . . . . .	0
45 - 59 . . . . .	2

N = 65

Med. = 180.75

M. = 185.15

SD. = 53.38

## KEYSTONE VISUAL SURVEY TESTS

School Survey Cumulative  
Record Form No. 1

For Use with Keystone Visual Survey Telebinocular

Name \_\_\_\_\_ Sex \_\_\_\_\_

Date \_\_\_\_\_ Teacher \_\_\_\_\_

Date of birth \_\_\_\_\_ C. Age \_\_\_\_\_ M. Age \_\_\_\_\_ Grade \_\_\_\_\_  
yr. mo. da. yr. mo. yr. mo.

School \_\_\_\_\_ City \_\_\_\_\_

Address \_\_\_\_\_ Phone \_\_\_\_\_

Referred to Clinic by \_\_\_\_\_

Approved by \_\_\_\_\_ Examiner \_\_\_\_\_

(Principal or \_\_\_\_\_)

Subject Failures \_\_\_\_\_

Wearing Glasses: Yes \_\_\_\_\_ No \_\_\_\_\_  
Snellen Standard (if desired)

With Glasses: Right \_\_\_\_\_ Left \_\_\_\_\_

Without Glasses: Right \_\_\_\_\_ Left \_\_\_\_\_

	Left Only	Right Only	Undesirable Tendency		Passable	PASS	Passable	Undesirable Tendency
<b>Test 1 (DB-10A)</b> Simultaneous Vision								
<b>Test 2 (DB-8C)</b> Vertical Imbalance	only 	only 						
<b>Test 3 (DB-9)</b> Lateral Imbalance (Far Point)	only 	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 Numbers Only						
<b>Test 4 (DB-4K)</b> Far Point Fusion	only 	only 	Four, widely separated 	Four, near each other 	Four, then three 		Four, then three 	Four, near each other 
<b>Test 5 (DB-1B)</b> Binocular Visual Efficiency			R <sup>1</sup> 20% L <sup>2</sup> 30% C <sup>3</sup> 40% B <sup>4</sup> 50% T <sup>5</sup> 60% C <sup>6</sup> 70% L <sup>7</sup> 80% B <sup>8</sup> 90% C <sup>9</sup> 100%				L <sup>10</sup> 105% R <sup>11</sup> 110%	Slide Holder out to _____
<b>Test 6 (DB-2B)</b> Left Eye Visual Efficiency	No Dots Seen Unless Right Eye is Occluded		T <sup>1</sup> 20% B <sup>2</sup> 30% C <sup>3</sup> 40% R <sup>4</sup> 50% L <sup>5</sup> 60% C <sup>6</sup> 70% B <sup>7</sup> 80% R <sup>8</sup> 90% C <sup>9</sup> 100%				B <sup>10</sup> 105% R <sup>11</sup> 110%	Slide Holder out to _____
<b>Test 7 (DB-3B)</b> Right Eye Visual Efficiency	No Dots Seen Unless Left Eye is Occluded		R <sup>1</sup> 20% L <sup>2</sup> 30% C <sup>3</sup> 40% B <sup>4</sup> 50% T <sup>5</sup> 60% C <sup>6</sup> 70% L <sup>7</sup> 80% B <sup>8</sup> 90% C <sup>9</sup> 100%				L <sup>10</sup> 105% R <sup>11</sup> 110%	Slide Holder out to _____
<b>Test 8 (DB-7R) (DB-7L)</b> Clearness of Image (Far Point and Near Point)	Left Balls only 	Right Balls only 	Very blurred lines in some and clear lines in others of the "Test Balls" at FAR POINT. Left:  Right:		No very blurred lines in any "Test Ball" at FAR POINT	Clear lines in all "Test Balls" at NEAR POINT and FAR POINT	No very blurred lines in any "Test Ball" at NEAR POINT Left:  Right:	Very blurred lines in some or all of the "Test Balls" at NEAR POINT.
<b>Test 9 (DB-9)</b> Lateral Imbalance (Near Point)	only 	12 11 10 9 8 7 6 5 4 3 2 1 Numbers Only						
<b>Test 10 (DB-5K)</b> Near Point Fusion	only 	only 	Four, widely separated 	Four, near each other 	Four, then three 		Four, then three 	Four, near each other 
<b>Test 11 (DB-6D)</b> Stereopsis	+ only 	only 	1 2 3 4 5 6 7 8 9 10 11 12 + ○ * ○ □ □ ♥ + *					
<b>Test 12</b> Color Perception	DB-11 Red-Green 1 4 2 1 3 8 4 3	DB-12 Yellow-Blue 1 1 2 8 3 4 4	All Correct					

**General Instructions** Arrange the slides in a pile, in the order below. Put three or four slides in the slide holder as soon as any slide has been used and removed, insert at the back of the slide holder the next slide on the pile, in this way keeping more than one slide in the slide holder until the completion of the test.



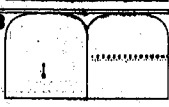




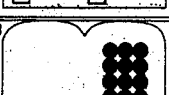


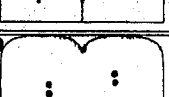
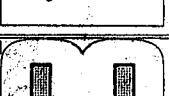
If the used slides are placed, face down, in a pile as they are removed, they will be in order for the next test, with the exception that when Test 3 is completed this slide (DB-9) should be placed by itself for use in Test 9.

**Interpretation of the Record Form.** When all replies are checked in the "Pass" column (set off by heavy lines) visual performance is considered to be satisfactory in so far as this test goes.

When all replies are checked within the "Pass" and "Passable" columns, further examination is probably unnecessary if there is no discomfort or below-normal reading ability. However, a retest should be given within 60 days.

When one or more replies are checked in the "Undesirable Tendency" columns a more complete examination is probably in order. "Near Point," "Reading Distance," and "2.50" are equivalents; "Far Point" and "00-00" are equivalents.

More complete directions are given on the back of each stereograph. **READ THEM!** Schools may use only "Minimum Responses

	ESSENTIAL QUESTIONS FOR TESTING	DIRECTIONS FOR SCORING
	1 Set slide holder at 00-00 Far Point. 2 "What do you see?" 2 "Is the dog in the hoop, is he just starting through the hoop, or is he through the hoop?"	Put a check mark (✓) on the picture most nearly corresponding to the reply. Both dog and pig must be seen at the same time.
	1 "Is the green line above the large ball, through the large ball, or below the large ball?" 2 "Is the ball on the right side or on the left side of the little mark in the middle of the green line?" (Optional question. No check mark needed)	Put a check mark (✓) on the design most nearly corresponding to the reply. If line is not through the ball, check the design in column most nearly corresponding to the position of the dog in TEST 1.
	1 "To what number does the arrow point?"	Put a vertical line on the figure or space between figures to which the arrow points. Should the arrow not come to rest use two lines, marking the extremes of motion with a horizontal arrow  →  or  ←  or  ↔  indicating direction of motion.
	1 "Do you see two balls, three balls, or four balls?" 2 "What color are they?" 3 If four balls are seen, ask, "Are the little faces looking at each other or away from each other?"	Put a check mark on the design most nearly corresponding to the reply. The position of the faces is important. The check mark as determined by the position of the faces should be on the same side of the "Pass" column as the check mark in TEST 3.
	1 "Do you see a little dot on the right side of signboard No. 1?" 2 "Where is the dot in signboard No. 2? In each of the other signboards?" Should dot in No. 11 be read correctly, move slide holder to extreme end of shaft and ask the next question. See Note 1.	Put a check mark on the last correct reply. If signboard No. 11 is read correctly and slide holder is moved out, indicate how far out, under "Slide Holder Out to-----"
	1 "Now where is the dot in signboard No. 1? In each of the other signboards?" 2 Should the patient not see dots in as many signboards as in TEST 5, cover the right barrel and ask, "Now can you see any more dots?"	Put a check mark on last correct reply when both eyes are open. If occlusion is used, put an "O" on last correct reply, even if it is the same as the reply checked.
	1 "Again tell me where the dots are in all the signboards." 2 Should the patient not see dots in as many signboards as in TEST 5, cover the left barrel and ask, "Now can you see any more dots?"	Same as for TEST 6.
	1 Some of the balls have clear black lines—they are called "Test Balls"; the others have blurred lines. (Note that No. 1 of the right-eye test is clear while Nos. 2 and 3 are blurred.) (On opposite page "Test Balls" are numbered.) 2 "What is clear in the 2nd row, 3d row, etc.? Are blurred 'Test Balls' completely blurred or only slightly blurred?" Use same test with DB-7R and DB-7L. Occlusion of the eye not being tested is desirable. See Note 2. Move slide holder to 2.50, Reading Distance, and ask for clear lines and blurred lines in the "Test Balls."	Put a check mark on all "Test Balls" in which lines are blurred. The "Test Balls" are the numbered balls. <b>DIRECTIONS FOR SCORING</b> <b>PASS SCORE.</b> Lines clear in all "Test Balls" at 00-00. <b>PASSABLE SCORE.</b> Lines only slightly blurred in some "Test Balls" at 00-00. <b>UNDESIRABLE TENDENCY SCORE.</b> Lines completely blurred in some "Test Balls" (like those blurred in the card) and clear in others at 00-00 or beyond. For Near Point Test set at 2.50, Reading Distance, and score as above.
	Slide holder is now in position for this test. 1 "To what number does the arrow point?"	Put a vertical line on the figure or space between figures to which the arrow points. Should the arrow move, see directions for TEST 3.
	1 "Do you see two balls, three balls, or four balls?" 2 "What color are they?" 3 If four balls are seen, ask, "Are the little faces looking at each other or away from each other?"	Put a check mark on the design most nearly corresponding to the reply. The position of the faces is important. The check mark as determined by the position of the faces should be on the same side of the "Pass" column as the check mark in TEST 9.
	Move slide holder to 00-00 or any point favored by patient. 1 "What do you see in the lower corners of the frame?" 2 "What seems to float in front of the card in line 1? In all the other lines?"	Check the last correct reply.
	1 DB-11. What figures do you see in each of the four squares? 2 DB-12. What figures do you see in each of the four squares?	Put a check mark on all correct replies.

**Note 1**  
 3 "Can you see the dot in signboard No. 9?" If the answer is "No," move slide holder toward the eyes and say, "Tell me when you can see the dot in signboard No. 9." Note position on shaft when seen, and record.

**Note 2**  
 If "Test Balls" are clear at 00-00, further information may be obtained by moving the slide holder slowly toward the end of the shaft. (See back of stereograph.)



# ASPECTS OF PERSONALITY

By **RUDOLF PINTNER**

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## For Grades 4 to 9 Inclusive

Name.....Date.....19.....

Grade.....Age.....yrs.....mos. Teacher.....

School.....City.....State.....

SECTION	ASPECT OF PERSONALITY	SCORE	PERCENTILE RANK
I	Ascendance-Submission		
II	Extroversion-Introversion		
III	Emotionality		

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## SECTION I

I

1. When some child tries to push into line ahead of me,  
I am not afraid to tell him to get back..... ☐ S ☐ D 1
2. I try to be the first one to get on a streetcar..... ☐ S ☐ D 2
3. I am among the first to yell at a game..... ☐ S ☐ D 3
4. I try to get a seat in the streetcar or train before  
someone else does..... ☐ S ☐ D 4
5. I get angry when the class leader is too "bossy."..... ☐ S ☐ D 5
6. I am usually doing the talking in any crowd..... ☐ S ☐ D 6
7. I find it hard to talk before other children..... ☐ S ☐ D 7
8. I talk back to a friend who is "bossy."..... ☐ S ☐ D 8
9. I like to show people around to meet other people..... ☐ S ☐ D 9
10. If there are pieces of salt in my ice cream, I tell the  
storekeeper about it..... ☐ S ☐ D 10
11. I tell the groceryman that it is my turn when the  
grocer tries to wait on someone else first..... ☐ S ☐ D 11
12. I try to get the storekeeper to sell me candy at a  
cheaper price..... ☐ S ☐ D 12
13. Even though I don't understand what the teacher  
says, I don't ask her to say it again..... ☐ S ☐ D 13
14. I do almost everything other people tell me to do..... ☐ S ☐ D 14
15. I am often against what people say..... ☐ S ☐ D 15
16. I stick to what I've said even if other children don't  
like it..... ☐ S ☐ D 16
17. I don't mind when other children get ahead of me in  
line..... ☐ S ☐ D 17
18. I have a lot of nerve..... ☐ S ☐ D 18
19. I always want to have my way with other people..... ☐ S ☐ D 19
20. I try to get my own way even if I have to fight for it.... ☐ S ☐ D 20

21. I think that friends who don't agree with me are stupid..... ☐ S ☐ D 21
22. I raise my hand so that the teacher will call on me to go on an errand..... ☐ S ☐ D 22
23. I do not like to be the leader in games..... ☐ S ☐ D 23
24. I start the fun at a quiet party..... ☐ S ☐ D 24
25. I do not like to start a new game among my friends, but I let someone else do it..... ☐ S ☐ D 25
26. I like to be the first in line when I play a game..... ☐ S ☐ D 26
27. I get the boys and girls together for parties, clubs, and teams..... ☐ S ☐ D 27
28. I don't like to ask questions in class..... ☐ S ☐ D 28
29. I want to lead the class..... ☐ S ☐ D 29
30. I like to stick up for my rights..... ☐ S ☐ D 30
31. I like to talk with someone else about my work..... ☐ S ☐ D 31
32. I like to go from one group of children to another and talk..... ☐ S ☐ D 32
33. When I make up my mind not to do a thing, I just won't do it..... ☐ S ☐ D 33
34. I always want to be with my father and mother..... ☐ S ☐ D 34
35. I feel sure I can do things I want to do..... ☐ S ☐ D 35

(Go right on to the next page.)

I

## SECTION II

## II

1. I do not like to have people ask me questions about myself..... ☐ S ☐ D <sub>1</sub>
2. I like baseball and football better than quiet games..... ☐ S ☐ D <sub>2</sub>
3. I would rather go to a party than stay at home..... ☐ S ☐ D <sub>3</sub>
4. I would rather play with other children than play alone..... ☐ S ☐ D <sub>4</sub>
5. I have many friends..... ☐ S ☐ D <sub>5</sub>
6. I do not make friends easily..... ☐ S ☐ D <sub>6</sub>
7. I like to go to school early because I have many friends waiting for me..... ☐ S ☐ D <sub>7</sub>
8. I like to make new friends..... ☐ S ☐ D <sub>8</sub>
9. I like friends more than books..... ☐ S ☐ D <sub>9</sub>
10. I find it easy to start speaking to a new pupil..... ☐ S ☐ D <sub>10</sub>
11. I keep quiet when I am with other people..... ☐ S ☐ D <sub>11</sub>
12. I like to spend my vacation at some quiet place..... ☐ S ☐ D <sub>12</sub>
13. I do not mind when people say bad things about me..... ☐ S ☐ D <sub>13</sub>
14. I like to spend money..... ☐ S ☐ D <sub>14</sub>
15. I can be scolded without feeling hurt..... ☐ S ☐ D <sub>15</sub>
16. I make up my mind quickly..... ☐ S ☐ D <sub>16</sub>
17. I like to be in assembly plays..... ☐ S ☐ D <sub>17</sub>
18. I like to have people look at me when I am working..... ☐ S ☐ D <sub>18</sub>
19. I like to read before the class..... ☐ S ☐ D <sub>19</sub>
20. I do not like to work alone..... ☐ S ☐ D <sub>20</sub>
21. I make up my mind without much thinking..... ☐ S ☐ D <sub>21</sub>
22. I like to go camping rather than read about it..... ☐ S ☐ D <sub>22</sub>
23. I would sooner say than write what I think..... ☐ S ☐ D <sub>23</sub>

24. I like to think a great deal. .... ☐ S ☐ D 24
25. I want to work alone because I don't want other  
people to be praised for my ideas. .... ☐ S ☐ D 25
26. I feel at home at parties. .... ☐ S ☐ D 26
27. I would rather play checkers than play ball. .... ☐ S ☐ D 27
28. I like to belong to clubs. .... ☐ S ☐ D 28
29. I like to play rough sports. .... ☐ S ☐ D 29
30. I like to tell my friends all about things that happen to  
me. .... ☐ S ☐ D 30
31. I worry about the little mistakes I make. .... ☐ S ☐ D 31
32. I like to read poetry. .... ☐ S ☐ D 32
33. I think of smart things to say afterward, when it is  
too late. .... ☐ S ☐ D 33
34. I like to take charge of things for the teacher. .... ☐ S ☐ D 34
35. I like to go around classes, collecting money for the  
Red Cross. .... ☐ S ☐ D 35

(Go right on to the next page.)

II

Score.....

## SECTION III

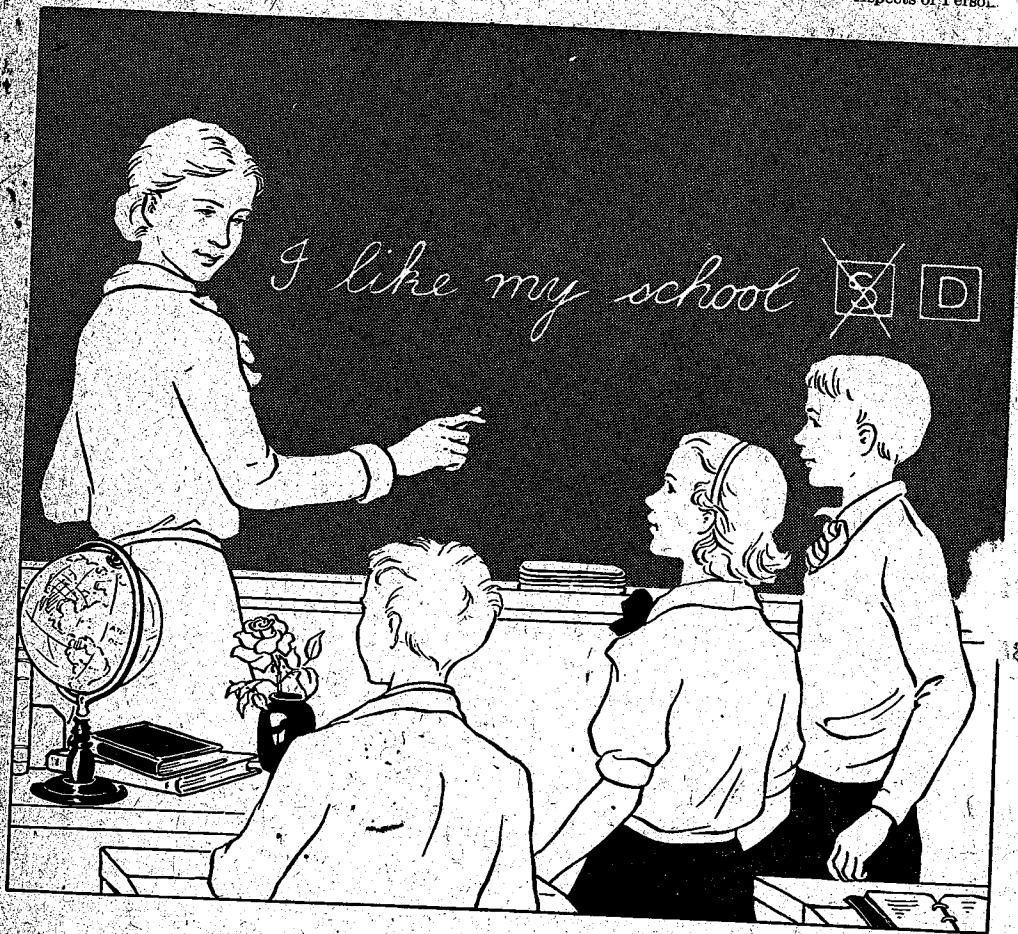
## III

1. I like to go to the movies. .... ☐ S ☐ D <sub>1</sub>
2. I think most children like to make fun of me. .... ☐ S ☐ D <sub>2</sub>
3. I get angry about nothing. .... ☐ S ☐ D <sub>3</sub>
4. I get so angry I can't talk. .... ☐ S ☐ D <sub>4</sub>
5. I fall and trip over things. .... ☐ S ☐ D <sub>5</sub>
6. I like to listen to the radio. .... ☐ S ☐ D <sub>6</sub>
7. I find it hard to forget my troubles. .... ☐ S ☐ D <sub>7</sub>
8. I often talk to myself. .... ☐ S ☐ D <sub>8</sub>
9. I like animals as pets. .... ☐ S ☐ D <sub>9</sub>
10. I often have ideas run through my head, so that I  
cannot sleep. .... ☐ S ☐ D <sub>10</sub>
11. I never tear pages from my school or library books. .... ☐ S ☐ D <sub>11</sub>
12. I often giggle and laugh for no reason at all. .... ☐ S ☐ D <sub>12</sub>
13. I often cry without good reason. .... ☐ S ☐ D <sub>13</sub>
14. I make believe I am somebody else. .... ☐ S ☐ D <sub>14</sub>
15. I am always afraid that sad things will happen to me. .... ☐ S ☐ D <sub>15</sub>
16. I do not talk during fire drill. .... ☐ S ☐ D <sub>16</sub>
17. I think that I was happier when I was a baby. .... ☐ S ☐ D <sub>17</sub>
18. I always cross the street at the corners. .... ☐ S ☐ D <sub>18</sub>
19. I often think people follow me at night. .... ☐ S ☐ D <sub>19</sub>
20. I think that my friends are against me. .... ☐ S ☐ D <sub>20</sub>
21. I often find it hard to breathe. .... ☐ S ☐ D <sub>21</sub>
22. I feel tired most of the time. .... ☐ S ☐ D <sub>22</sub>
23. I often feel sick when I have to go to school. .... ☐ S ☐ D <sub>23</sub>
24. I worry about getting sick. .... ☐ S ☐ D <sub>24</sub>
25. I don't like to be absent. .... ☐ S ☐ D <sub>25</sub>

26. I am afraid to sit in a small room with the door shut. . . . ☐ S ☐ D 26
27. I am very much afraid of water. . . . ☐ S ☐ D 27
28. I wish to do the right thing, but sometimes I can't get myself to do it. . . . ☐ S ☐ D 28
29. I cannot stand even a small noise. . . . ☐ S ☐ D 29
30. I am afraid of thunder. . . . ☐ S ☐ D 30
31. I feel that I haven't a friend. . . . ☐ S ☐ D 31
32. I like my school because it is clean. . . . ☐ S ☐ D 32
33. Everything gets on my nerves. . . . ☐ S ☐ D 33
34. I often feel sad for no reason at all. . . . ☐ S ☐ D 34
35. I say one thing and do another. . . . ☐ S ☐ D 35
36. I like to tease my friends until they cry. . . . ☐ S ☐ D 36
37. I like this Same-Different game. . . . ☐ S ☐ D 37
38. I believe almost anything that anybody tells me. . . . ☐ S ☐ D 38
39. I cry when I am in trouble, because then people pity me. . . . ☐ S ☐ D 39
40. I can't forget a wrong that's been done me. . . . ☐ S ☐ D 40
41. I think that everybody keeps away from me. . . . ☐ S ☐ D 41
42. I think my teacher is always watching me. . . . ☐ S ☐ D 42
43. I think my parents pick on me too much. . . . ☐ S ☐ D 43
44. I feel I get blamed for things I did not do. . . . ☐ S ☐ D 44

III

Score . . . . .



Here is a picture of some children playing a game called *Same-Different*. In playing this game the teacher writes a sentence on the blackboard, such as "I like my school." Then she asks all those children who feel the same way to raise their hands. Next she asks all those who feel different to raise their hands. Someone counts the hands and keeps score. The teacher writes a number of these sentences on the board, and for each one she asks those who feel the same to raise their hands and then she asks those who feel different to raise their hands.

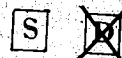
We are going to play this game, too; only this time you will find all the sentences written in this booklet. Read each sentence carefully. Ask yourself whether you feel the same or different. If you feel the same, cross out the little square at the right which has the letter S in it, like this:

"I like my school."



If you feel different, cross out the square with the D in it, like this:

"I like my school."



Read every statement, decide how you feel about it, and then cross out the square which tells how you feel.

There are no right or wrong answers, since many people feel different about these matters.





**PROGRESSIVE ACHIEVEMENT TEST—ELEMENTARY BATTERY Form B***(Diagnostic Tests Keyed to the Curriculum)*Devised by Ernest W. Tiegs, Dean, University College, The University of Southern California,  
and Willis W. Clark, Director of Research and Guidance, Los Angeles County Schools.

Name \_\_\_\_\_ Grade \_\_\_\_\_ Sex B-G

School \_\_\_\_\_ Age \_\_\_\_\_ Birthday \_\_\_\_\_

Teacher \_\_\_\_\_ Date \_\_\_\_\_

ST	SUBJECT	Possible Score	Pupil's Score	Grade Placement	DIAGNOSTIC PROFILE (Chart pupil's scores here.)		Percentile Rank
					Grade Placement	1943 Edition	
					2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0		
	Reading Vocabulary . . .	90	_____	_____	20 30 40 50 55 60 65 70 75 80 85 86 87		
	A. Word Form . . . . .	25	_____	_____	12 15 20 21 22 23 24 25 25 25		
	B. Word Recognition . . .	20	_____	_____	7 10 12 14 16 17 18 19 20 20 20		
	C. Meaning of Opposites . .	23	_____	_____	1 2 3 5 7 9 11 13 14 15 16 17 18 20 21 22		
	D. Meaning of Similarities .	22	_____	_____	1 2 3 4 6 8 10 11 12 15 16 17 18 19 20		
	Reading Comprehension . .	40	_____	_____	2 3 4 6 8 10 15 20 25 30 35 38		
	E. Following Directions . .	10	_____	_____	1 2 3 4 5 6 7 8 9 10		
	F. Interpretations . . . . .	20	_____	_____	1 2 4 6 8 9 12 15 18 19		
	G. Reference Skills . . . . .	10	_____	_____	1 2 4 5 6 7 8 9 10		
	TOTAL READING . . . . .	130	_____	_____	25 35 45 55 65 75 85 95 105 110 115 120 125		
	Arithmetic Reasoning . . .	45	_____	_____	2 3 6 9 14 19 24 27 30 35 39 40		
	A. Number Concept . . . . .	15	_____	_____	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		
	B. Signs and Symbols . . . .	15	_____	_____	1 2 4 6 8 9 10 11 12 13 14 15		
	C. Problems . . . . .	15	_____	_____	1 2 3 4 5 6 7 8 9 10 11 12 13 14		
	Arithmetic Fundamentals . .	80	_____	_____	1 5 10 15 20 25 30 40 50 55 65 70 73 76		
	D. Addition . . . . .	20	_____	_____	1 2 3 4 5 6 7 8 9 10 12 15 18 19		
	E. Subtraction . . . . .	20	_____	_____	1 3 5 6 7 8 9 12 15 18 19		
	F. Multiplication . . . . .	20	_____	_____	1 2 3 4 8 9 11 13 15 17 18 19		
	G. Division . . . . .	20	_____	_____	1 2 3 5 7 9 12 15 17 18 19		
	TOTAL ARITHMETIC . . . . .	125	_____	_____	2 5 10 15 20 30 35 45 55 70 80 90 100 110 120		
	Language . . . . .	90	_____	_____	5 15 20 25 30 40 45 50 55 60 65 72 75 80 85		
	A. Capitalization . . . . .	15	_____	_____	1 2 3 4 5 6 7 8 9 10 11 12 13 14		
	B. Punctuation . . . . .	10	_____	_____	1 2 3 4 5 6 7 8 9		
	C. Words and Sentences . .	20	_____	_____	1 3 5 6 8 10 11 12 13 14 15 16 17 18 19 20		
	D. Spelling . . . . .	30	_____	_____	1 2 3 4 7 8 10 14 16 18 20 22 25 26 27 28 29		
	E. Handwriting . . . . .	15	_____	_____	2 3 4 5 6 7 8 9 10 11		
	TOTAL . . . . .	345	_____	_____	30 50 75 100 120 140 160 180 200 220 240 260 280 300 320 330		
					2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0		

Grade Placement

## DIAGNOSTIC ANALYSIS OF LEARNING DIFFICULTIES

If the diagnostic profile of a test indicates that a pupil is making normal progress in all fields the teacher will have no use for the following diagnostic analysis. However, where the diagnostic profile shows achievement below a desirable standard in one or more major fields, the following device, which appears somewhere on every Progressive Achievement Test, will assist in identifying and analyzing the specific causes of difficulty as a basis for remedial instruction.

The numerals and capital letters in the diagnostic analysis correspond to the sections of the test similarly marked. For example, if the diagnostic profile shows unsatisfactory achievement in Test 4, Sec. (addition in arithmetic fundamentals), an inspection of the unsatisfactory responses in this section of the test (by number) will reveal whether or not remedial instruction is needed in carrying, use of zeros, reducing to common denominators, and the like. These topics are then checked by the teacher as the basis for remedial work.

Once an adequate diagnosis has been made, remedial instruction is frequently a simple matter. However, teachers have in the past found the clerical work incident to following each individual pupil a heavy burden. Such extra work is almost completely eliminated if this diagnostic analysis is torn from the test booklet and kept at the teacher's desk where the various items may be checked off as the pupil masters them.

### READING

#### 1. Reading Vocabulary

##### A. WORD FORM:

- Lower case words.....1-15
- Capitals.....16-19
- Miscellaneous type faces.....20-25

(Errors may indicate poor vision)

##### B. WORD RECOGNITION:

- Gross differences.....1, 4, 6
- Initial sounds or endings.....All others

(Errors may indicate poor hearing)

##### C. OPPOSITES:

- Basic vocabulary.....1-23

##### D. SIMILARITIES:

- Basic vocabulary.....1-22

#### 2. Reading Comprehension

##### E. FOLLOWING SPECIFIC DIRECTIONS:

- Simple directions.....1, 5
- Directions requiring simple choice.....2-4, 6-8
- Reading definitions and following directions.....9-10

##### F. INTERPRETATION OF MEANINGS:

- Selecting topic or central idea.....1, 7

- Understanding directly stated facts.....2, 3, 8, 9, 12,
- Making inferences.....4, 5, 6, 10,
- Comprehension of author's organization of topics.....14, 15,
- Sequence of events.....17-

##### G. REFERENCE SKILLS:

- Parts of book.....1
- Alphabetizing.....3
- Use of table of contents.....5
- Use of index.....8-

#### 3. Arithmetic Reasoning

##### A. NUMBER CONCEPT:

- Writing numbers.....1-5
- Writing money.....6-7
- Roman numbers.....8-10
- Concept of whole numbers.....11
- Concept of fractions, decimals, and per cent.....12-15

##### B. SIGNS AND SYMBOLS:

- Signs.....1-9, 12-15
- Abbreviations.....10-11

##### C. PROBLEMS:

- One-step.....1-4
- Two-step.....5-8
- Sharing and averaging.....4, 6, 7, 8
- Square measure and cubic content.....9, 10
- Percentage.....13, 14
- Ratio.....15

#### 4. Arithmetic Fundamentals

##### D. ADDITION:

- Simple combinations.....1-3
- Bridging.....4
- Carrying.....5, 6

### ARITHMETIC

- Zeros.....2, 3
- Bridging.....4
- Column addition.....7, 8
- Adding money.....8, 9
- Adding numerators.....10
- Reducing fractions to common denominators.....11, 13-16
- Adding mixed numbers.....12-16
- Adding fractions and decimals.....17
- Writing decimals in columns.....18-19
- Denominate numbers.....20

##### E. SUBTRACTION:

- Simple combinations.....1-4
- Borrowing.....5-7
- Zeros.....3, 4, 7
- Subtracting money.....8, 9
- Subtracting numerators.....10, 11
- Reducing fractions to common denominators.....12, 13
- Borrowing with mixed numbers.....14-16
- Subtracting fractions from decimals.....17

- Writing decimals in columns.....18,
- Denominate numbers.....

##### F. MULTIPLICATION:

- Tables.....1
- Zeros in multiplicand.....2,
- Zeros in multiplier.....7,
- Two-place multipliers.....6
- Mult. with fractions.....10,
- Cancellation of fractions.....12,
- Fractions and mixed or whole numbers.....14-
- Pointing off decimals.....18,
- Denominate numbers.....

##### G. DIVISION:

- Tables.....1
- Zeros in quotient.....3, 6, 8
- Remainders.....
- Inverting divisors in fractions.....11-
- Mixed numbers.....16,
- Reducing fractions to decimals.....
- Pointing off decimals.....19,

### LANGUAGE

#### 5. Language

##### A. CAPITALIZATION:

- First word of sentence.....1-3
- Names of persons.....4, 6, 9
- Names of places.....3, 6, 7
- Days of week and months.....5, 9
- Abbreviation for months.....5
- First word of quotation.....8
- Over-capitalization.....

##### B. PUNCTUATION:

- Periods.....
- Commas.....
- Quotation marks.....
- Question marks.....
- Over-punctuation.....

##### C. WORDS AND SENTENCES:

- Good usage.....1, 2, 3, 5
- Tense.....6, 7
- Case.....4, 8, 9

- Number.....
- Recognizing sentences.....11-

##### D. SPELLING:

- .....
- .....
- .....

##### E. HANDWRITING:

- Legibility.....

# TEST 1. SEC. A

**Directions:** If two words are the same or mean the same write S. If they are different or mean different things, write D.

Sample: dog.....S.....dog  
boy.....D.....girl

1. run.....have
2. fire.....fire
3. mother.....mother
4. boy.....bay
5. chloride.....chloride
6. engrave.....engrave
7. distrust.....district
8. glossary.....gloomy
9. league.....league
0. shriek.....shrub
1. ponder.....poplar
2. wither.....weather
3. forceps.....forceps
4. manipulation.....manifestation
5. interpellation.....interpolation
6. WARRIOR.....WARRIOR
7. PLAINT.....PLAIT
8. PLEASANT.....PLEASANT
9. HEMORRHAGE.....HEMISPHERE
0. subterranean.....SUBTERRANEAN
1. PINK.....PICK
2. THROUGH.....through
3. vaccination.....VOCIFERATION
4. straighten.....straighten
5. miraculous.....miraculous

Sec. A. Score (number right).....

# 46 PRACTICE EXERCISE

On the following pages, you will find directions such as the following:

Draw a line under the word **dog** and write its number on the line to the right.

1 book    2 bat    3 dog    4 go    3    1

Notice that the word **dog** has a line drawn under it and that number 3 is written on the line to the right.

Draw a line under the word pronounced by the teacher. Write its number on the line to the right.

1 run    2 jump    3 throw    4 swing    — 2

## TEST 1. SEC. B

**Directions:** Draw a line under the word pronounced by the teacher. Write its number on the line to the right.

- |               |              |               |                |      |
|---------------|--------------|---------------|----------------|------|
| 1 this        | 2 ball       | 3 my          | 4 tree         | — 1  |
| 1 grand       | 2 great      | 3 grunt       | 4 growl        | — 2  |
| 1 wrath       | 2 wrist      | 3 wreck       | 4 write        | — 3  |
| 1 Thursday    | 2 Wednesday  | 3 Tuesday     | 4 Monday       | — 4  |
| 1 chattering  | 2 moulting   | 3 singeing    | 4 singing      | — 5  |
| 1 July        | 2 January    | 3 June        | 4 August       | — 6  |
| 1 thought     | 2 throughout | 3 through     | 4 thoroughfare | — 7  |
| 1 precious    | 2 practice   | 3 prairie     | 4 practical    | — 8  |
| 1 warship     | 2 waltz      | 3 wanness     | 4 warrant      | — 9  |
| 1 electrocute | 2 elasticity | 3 elimination | 4 efficient    | — 10 |
| 1 premium     | 2 political  | 3 public      | 4 primary      | — 11 |
| 1 blizzard    | 2 bluster    | 3 blight      | 4 blotch       | — 12 |
| 1 associate   | 2 avenue     | 3 acquire     | 4 arrival      | — 13 |
| 1 YIELD       | 2 YOUNG      | 3 YAM         | 4 YACHT        | — 14 |
| 1 WHISTLE     | 2 WHARF      | 3 wholesale   | 4 whirl        | — 15 |
| 1 recipe      | 2 recital    | 3 regime      | 4 receipt      | — 16 |
| 1 contagious  | 2 carnival   | 3 cautious    | 4 cafeteria    | — 17 |
| 1 MASSACRE    | 2 maximum    | 3 material    | 4 menagerie    | — 18 |
| 1 chloroform  | 2 chauffeur  | 3 chapeau     | 4 charlatan    | — 19 |
| 1 rheometer   | 2 pneumatics | 3 rheumatic   | 4 pneumonia    | — 20 |

Sec. B. Score (number right).....

# TEST 1. SEC. C

Directions: Draw a line under the word which means the opposite or about the opposite of the first word. Write its number on the line to the right.

0. **little** <sup>1</sup> blue <sup>2</sup> run <sup>3</sup> big <sup>4</sup> rich 3 0
1. **high** <sup>1</sup> crooked <sup>2</sup> lost <sup>3</sup> low <sup>4</sup> end — 1
2. **give** <sup>1</sup> raw <sup>2</sup> bill <sup>3</sup> stem <sup>4</sup> receive — 2
3. **cry** <sup>1</sup> mind <sup>2</sup> laugh <sup>3</sup> family <sup>4</sup> add — 3
4. **strong** <sup>1</sup> brook <sup>2</sup> that <sup>3</sup> sugar <sup>4</sup> weak — 4
5. **sweet** <sup>1</sup> sour <sup>2</sup> hint <sup>3</sup> feature <sup>4</sup> swell — 5
6. **youth** <sup>1</sup> dead <sup>2</sup> cause <sup>3</sup> age <sup>4</sup> arrive — 6
7. **hastily** <sup>1</sup> hate <sup>2</sup> aid <sup>3</sup> love <sup>4</sup> leisurely — 7
8. **safety** <sup>1</sup> danger <sup>2</sup> alarm <sup>3</sup> refuse <sup>4</sup> hate — 8
9. **attack** <sup>1</sup> age <sup>2</sup> defense <sup>3</sup> warn <sup>4</sup> alarm — 9
10. **below** <sup>1</sup> love <sup>2</sup> cause <sup>3</sup> above <sup>4</sup> permit — 10
11. **despair** <sup>1</sup> grocery <sup>2</sup> demolish <sup>3</sup> hope <sup>4</sup> orator — 11
12. **tame** <sup>1</sup> spot <sup>2</sup> repeat <sup>3</sup> treat <sup>4</sup> wild — 12
13. **solid** <sup>1</sup> liquid <sup>2</sup> soldier <sup>3</sup> torrid <sup>4</sup> whistle — 13
14. **east** <sup>1</sup> under <sup>2</sup> west <sup>3</sup> ease <sup>4</sup> best — 14
15. **aloud** <sup>1</sup> bracelet <sup>2</sup> chirp <sup>3</sup> silent <sup>4</sup> almond — 15
16. **dainty** <sup>1</sup> assume <sup>2</sup> curtain <sup>3</sup> coarse <sup>4</sup> dairy — 16
17. **inferior** <sup>1</sup> conquest <sup>2</sup> invite <sup>3</sup> ideal <sup>4</sup> superior — 17
18. **peril** <sup>1</sup> safety <sup>2</sup> mental <sup>3</sup> remote <sup>4</sup> purse — 18
19. **victor** <sup>1</sup> statue <sup>2</sup> loser <sup>3</sup> treaty <sup>4</sup> wallet — 19
20. **sad** <sup>1</sup> mood <sup>2</sup> vocal <sup>3</sup> glad <sup>4</sup> sap — 20
21. **unseen** <sup>1</sup> notice <sup>2</sup> valor <sup>3</sup> unsteady <sup>4</sup> visible — 21
22. **traitor** <sup>1</sup> friend <sup>2</sup> weasel <sup>3</sup> young <sup>4</sup> tragic — 22
23. **expensive** <sup>1</sup> infect <sup>2</sup> excel <sup>3</sup> cheap <sup>4</sup> experiment — 23

Sec. C. Score (number right).....

# TEST 1. SEC. D

Directions: Draw a line under the word which means the same or about the same as the first word. Write its number on the line to the right.

0. **large** <sup>1</sup> pretty <sup>2</sup> run <sup>3</sup> big <sup>4</sup> rich 3 0
1. **enemy** <sup>1</sup> foe <sup>2</sup> weigh <sup>3</sup> subdue <sup>4</sup> thicken — 1
2. **promise** <sup>1</sup> pure <sup>2</sup> compact <sup>3</sup> neutral <sup>4</sup> lovely — 2
3. **lie** <sup>1</sup> untrue <sup>2</sup> amateur <sup>3</sup> denial <sup>4</sup> casual — 3
4. **trade** <sup>1</sup> merchant <sup>2</sup> vein <sup>3</sup> ideal <sup>4</sup> exchange — 4
5. **hard** <sup>1</sup> dense <sup>2</sup> hint <sup>3</sup> feature <sup>4</sup> deed — 5
6. **wit** <sup>1</sup> hail <sup>2</sup> fear <sup>3</sup> humor <sup>4</sup> ink — 6
7. **calm** <sup>1</sup> quiet <sup>2</sup> token <sup>3</sup> vanity <sup>4</sup> stucco — 7
8. **industry** <sup>1</sup> infantry <sup>2</sup> business <sup>3</sup> repent <sup>4</sup> outbreak — 8
9. **consent** <sup>1</sup> love <sup>2</sup> alarm <sup>3</sup> permission <sup>4</sup> cause — 9
10. **speech** <sup>1</sup> defend <sup>2</sup> feast <sup>3</sup> cure <sup>4</sup> talk — 10
11. **prophet** <sup>1</sup> mangle <sup>2</sup> obstruct <sup>3</sup> seer <sup>4</sup> pleasant — 11
12. **settlement** <sup>1</sup> wise <sup>2</sup> innocent <sup>3</sup> silent <sup>4</sup> location — 12
13. **hush** <sup>1</sup> quiet <sup>2</sup> keen <sup>3</sup> mood <sup>4</sup> hurl — 13
14. **freight** <sup>1</sup> allow <sup>2</sup> cargo <sup>3</sup> hurl <sup>4</sup> easy — 14
15. **physician** <sup>1</sup> leisure <sup>2</sup> enemy <sup>3</sup> doctor <sup>4</sup> ugly — 15
16. **magnificent** <sup>1</sup> purchase <sup>2</sup> magician <sup>3</sup> stationary <sup>4</sup> exquisite — 16
17. **abolish** <sup>1</sup> ocean <sup>2</sup> cry <sup>3</sup> high <sup>4</sup> destroy — 17
18. **plenty** <sup>1</sup> sufficient <sup>2</sup> stem <sup>3</sup> friend <sup>4</sup> wonder — 18
19. **tray** <sup>1</sup> land <sup>2</sup> container <sup>3</sup> brook <sup>4</sup> expect — 19
20. **amuse** <sup>1</sup> entertain <sup>2</sup> fertile <sup>3</sup> doubt <sup>4</sup> amount — 20
21. **hatred** <sup>1</sup> haul <sup>2</sup> nurse <sup>3</sup> doubt <sup>4</sup> enmity — 21
22. **lecture** <sup>1</sup> pulpit <sup>2</sup> rigor <sup>3</sup> sermon <sup>4</sup> ledge — 22

Sec. D. Score (number right).....

## TEST 2. SEC. E

Read the following and carry out the directions:

1. Cross out two letters to make count out of this word: **country** 1
2. Draw a line under the name of the largest animal, and put its number on the line to the right.  
<sup>1</sup> dog   <sup>2</sup> rat   <sup>3</sup> cow   <sup>4</sup> sheep 2
3. Some of the Roman numerals are:  
 19 XIX, 21 XXI, 30 XXX, 31 XXXI.  
 Write 30 in Roman numerals on the line to the right. 3
4. Write the first word in this sentence on the line to the right. 4
5. Write in the missing letter in the word, horse. Hors 5
6. Cross out the third word and write it on the line to the right.  
<sup>1</sup> girl   <sup>2</sup> woman   <sup>3</sup> cat   <sup>4</sup> mother 6
7. Write the first letter of the girls' names on the line to the right.  
<sup>1</sup> Marie   <sup>2</sup> Arthur   <sup>3</sup> Richard   <sup>4</sup> Mary 7
8. Look at the numbers below. Write the third number to the right of 8 on the line to the right.  
 6   3   4   8   5   2   1   9   0 8
9. When two words are spoken as one, the shortened form is a contraction. The apostrophe denotes the missing letters, such as: can not, can't. Write the word meaning **do not** in the form of a contraction on the line to the right. 9
10. The suffix, **ness**, is used to form nouns meaning state or quality of being, such as: sick-sickness. Add the suffix, **ness** to the word white, and write it on the line to the right. 10

Go right on to the next column.

Sec. E. Score (number right) \_\_\_\_\_

## TEST 2. SEC. F

Read this story:

Camels live mostly on the desert. They have padded feet, nostrils that can be closed in a storm, and thick bushy eyebrows and lashes which protect their eyes. Their stomachs and humps are made up of cells which store their water and food for future use on their long journeys through the desert wastes. They are the principal means of transportation on the Sahara Desert.

Draw a line under the correct answer. Write its number on the line to the right.

1. The best title for the above story is  
<sup>1</sup> Domestic Animals   <sup>2</sup> The Camel  
<sup>3</sup> The Desert 1
2. Camels are useful  
<sup>1</sup> in large cities   <sup>2</sup> as food  
<sup>3</sup> in transportation 2
3. The camel's stomach and hump contain  
<sup>1</sup> fur   <sup>2</sup> cells   <sup>3</sup> pads 3
4. The camel eats  
<sup>1</sup> irregularly   <sup>2</sup> regularly   <sup>3</sup> rarely 4
5. The camel is  
<sup>1</sup> wild   <sup>2</sup> useless   <sup>3</sup> useful 5
6. His home is in the  
<sup>1</sup> desert   <sup>2</sup> jungles   <sup>3</sup> mountains 6

Go right on to the next page.

## TEST 2. SEC. F (Continued)

Read this story:

One of the large countries in North America is Canada.

Canada has an irregular coast line with many fine harbors. It is lacking in large ports because of the ice-bound harbors in the winter, and this is a serious handicap to the development of trade.

Canada is rich in natural resources, but the population is still small. There are vast areas of valuable forests; the many fur-bearing animals are a source of great revenue; and the streams have unlimited possibilities for the development of power.

Draw a line under the correct answer. Write its number on the line to the right.

7. The above story is about  
1 North America 2 Canada  
3 large countries \_\_\_\_\_ 7
8. They have  
1 few natural resources  
2 many large ports 3 fine harbors \_\_\_\_\_ 8
9. A serious handicap is  
1 over-production 2 ice-bound harbors  
3 lack of streams \_\_\_\_\_ 9
10. The climate of Canada is  
1 changeable 2 very dry  
3 equatorial \_\_\_\_\_ 10
11. Choose the best statement  
1 Canada has few natural resources  
2 The cotton is profitable in Canada  
3 Canada has many  
unsettled areas \_\_\_\_\_ 11

Read this story:

### THE TELEPHONE

The telephone is a device for transmitting speech by means of electricity. The first patent for this instrument was granted to Alexander G. Bell on March 7, 1876.

Following the original invention, there have been many improvements in the mechanical features of telephones. Submarine cables have been laid across the ocean to permit communication between countries, and many overhead wires have been removed by burying the wires in conduits under ground. Recently there has been a great amount of experimentation with wireless telephony.

Go right on to the next column.

The principal achievement of the telephone is that of abridging space. By this means of communication, business transactions and conversations are more quickly completed and trade and commerce have been greatly stimulated. Thus, we see that telephones have been a definite aid in the progress of our nation.

Write the numbers of the correct answers on the line to the right.

12. Alexander G. Bell was an  
1 artist 2 inventor  
3 navigator 4 naturalist \_\_\_\_\_ 12
13. Conduits have been used to remove  
1 submarine cables  
2 overhead wires  
3 commerce  
4 business transactions \_\_\_\_\_ 13

Of the six statements below select the one that would make the best title for each of the three paragraphs of the story. On the lines to the right put a "1" opposite the one you select for the first paragraph, a "2" opposite the one you select for the second paragraph, and a "3" opposite the one you select for the third paragraph.

14, 15, 16

- March 7, 1876 \_\_\_\_\_
- Invention of the telephone \_\_\_\_\_
- Recent improvements and developments \_\_\_\_\_
- Mechanical features \_\_\_\_\_
- Effects of the invention \_\_\_\_\_
- Trade and commerce \_\_\_\_\_

Number these statements on the lines to the right to show the order in which they occur in the story.

- Removing overhead wires \_\_\_\_\_ 1
- Granting the patent \_\_\_\_\_ 1
- Wireless telephony \_\_\_\_\_ 1
- Inventing the telephone \_\_\_\_\_ 2

Go right on to the next page.

Sec. F. Score (number right).....

## TEST 2. SEC. G

**Directions:** Draw a line under the correct answer. Write its number on the line to the right.

1. The preface is found in what part of the book?  
<sup>1</sup> beginning    <sup>2</sup> middle    <sup>3</sup> end    \_\_\_\_\_ 1
2. The index is found in what part of the book?  
<sup>1</sup> beginning    <sup>2</sup> middle    <sup>3</sup> end    \_\_\_\_\_ 2

Read this list of words:

live	spoon
join	box
hide	kind
quick	pound

these words were arranged alphabetically,

3. **kind** would come after  
<sup>1</sup> box    <sup>2</sup> live    <sup>3</sup> join    <sup>4</sup> hide    \_\_\_\_\_ 3
4. **spoon** would come after  
<sup>1</sup> quick    <sup>2</sup> toil    <sup>3</sup> pound    <sup>4</sup> kind    \_\_\_\_\_ 4

Look at the following:

### TABLE OF CONTENTS

Chapter	Page
1. How Man Conquered the Wilderness	1
2. Poultry and Eggs.....	19
3. Transportation .....	43
4. Why We Need Food.....	50
5. The Nations of the Earth.....	71
6. Communication .....	88
7. Why the World Works.....	100

On what page does "Transportation" begin? \_\_\_\_\_ 5

Which of these stories is on page 88?

- <sup>1</sup> Poultry and Eggs
- <sup>2</sup> Communication
- <sup>3</sup> Transportation    \_\_\_\_\_ 6

The material on page 40 is part of what chapter? \_\_\_\_\_ 7

Go right on to the next column.

**Directions:** Look at the index at the bottom of the page and find the answers to these questions.

8. Information about the Ohio River will be found on what page? \_\_\_\_\_ 8
9. Information concerning oil in Rumania will be found on what page? \_\_\_\_\_ 9
10. Information concerning the physical features of Oklahoma will be found on what page? \_\_\_\_\_ 10

### INDEX

Ohio River, 134.

Oil: in Irak, 383; in Manchuria, 400; in Persia, 382; on plains, 56; in Rumania, 329; in Trans-Caucasion Regions, 377; in Yugoslavia, 331.

Oil cakes, what they are, 27.

Oil seeds, in British East Africa, 355.

Oklahoma: cattle in, 141; chief city of, 147; climate of, 132; cotton in, 137; oil in, 141; physical features of, 135; rank of, in agriculture, 140; wheat in, 157.

Olive pressing, in Albania, 333.

Olives: in Africa, 349; in Anatolia, 376; in California 190; in Greece, 332; in Italy, 337.

Sec. G. Score (number right) \_\_\_\_\_

Stop Here

# TEST 3. SEC. A

Write each of these sums on the line to the right, using numerals.

Twelve 12 0

Thirty-four \_\_\_\_\_ 1

Two hundred twenty-two \_\_\_\_\_ 2

Nine hundred fifty-two \_\_\_\_\_ 3

Three hundred four \_\_\_\_\_ 4

Two thousand six \_\_\_\_\_ 5

Two dollars and two cents \_\_\_\_\_ 6

Sixty dollars and nine cents \_\_\_\_\_ 7

Draw a line under the correct number and write it on the line to the right.

IV means 2 4 6 8 \_\_\_\_\_ 8

XXX means 25 29 30 31 \_\_\_\_\_ 9

M means 1000 4000 5000 7000 \_\_\_\_\_ 10

Draw a line under the largest number in each row and write it on the line to the right.

128 226 321 190 \_\_\_\_\_ 11

$\frac{2}{3}$   $\frac{1}{4}$   $\frac{1}{5}$   $\frac{2}{5}$  \_\_\_\_\_ 12

20.01 2.0671 21.3 5.361 \_\_\_\_\_ 13

.25  $\frac{4}{5}$  .62  $\frac{1}{2}$   $\frac{5}{8}$  \_\_\_\_\_ 14

$\frac{1}{3}$   $\frac{2}{7}$  75%  $\frac{2}{5}$  \_\_\_\_\_ 15

Sec. A. Score (number right) \_\_\_\_\_

# TEST 3. SEC. B

Write the correct answer on the line to the right.

$5 \times 8 =$  \_\_\_\_\_ 1

$9 \div 3 =$  \_\_\_\_\_ 2

$5 + 5 =$  \_\_\_\_\_ 3

$20 - 4 =$  \_\_\_\_\_ 4

Draw a line under the correct word. Write its number on the line to the right.

$\div$  means <sup>1</sup> add <sup>2</sup> subtract  
<sup>3</sup> multiply <sup>4</sup> divide \_\_\_\_\_

$+$  means <sup>1</sup> add <sup>2</sup> subtract  
<sup>3</sup> multiply <sup>4</sup> divide \_\_\_\_\_

$-$  means <sup>1</sup> add <sup>2</sup> subtract  
<sup>3</sup> multiply <sup>4</sup> divide \_\_\_\_\_

$\times$  means <sup>1</sup> add <sup>2</sup> subtract  
<sup>3</sup> multiply <sup>4</sup> divide \_\_\_\_\_

$\%$  means <sup>1</sup> cent <sup>2</sup> quarter  
<sup>3</sup> dime <sup>4</sup> dollar \_\_\_\_\_

oz. means <sup>1</sup> hour <sup>2</sup> inch  
<sup>3</sup> ounce <sup>4</sup> root \_\_\_\_\_

sec. means <sup>1</sup> foot <sup>2</sup> second  
<sup>3</sup> part <sup>4</sup> ratio \_\_\_\_\_

$\pi$  means <sup>1</sup> degree <sup>2</sup> pi  
<sup>3</sup> root <sup>4</sup> part \_\_\_\_\_

$\%$  means <sup>1</sup> degree <sup>2</sup> inch  
<sup>3</sup> per cent <sup>4</sup> ratio \_\_\_\_\_

" means <sup>1</sup> angle <sup>2</sup> foot  
<sup>3</sup> at <sup>4</sup> inch \_\_\_\_\_

$\sqrt{\quad}$  means <sup>1</sup> care of <sup>2</sup> less than  
<sup>3</sup> square root <sup>4</sup> right angle \_\_\_\_\_

Sec. B. Score (number right) \_\_\_\_\_



# TEST 3. SEC. C

# 49 TEST 3. SEC. C (Continued)

Directions: Work the problems. Write each answer on the line to the right.

1. Nan has five pieces of candy. Fred has ten pieces of candy. How many pieces have they together?

\_\_\_\_\_ 1

2. A farmer had 14 cows. He sold 4 of them. How many cows did he have left?

\_\_\_\_\_ 2

3. Ann has 2 dolls. Sally has three times as many. How many dolls does Sally have?

\_\_\_\_\_ 3

4. Jane had 9 apples and she divided them equally among herself and two other girls. How many apples did each receive?

\_\_\_\_\_ 4

5. One dish contained twelve cookies and another contained eighteen. The children ate 6 of the cookies. How many cookies were left?

\_\_\_\_\_ 5

6. A class-room had six rows of desks with 7 desks in each row. Five desks were moved from the room. How many desks were left?

\_\_\_\_\_ 6

7. Mr. Smith had 100 chickens and sold 40. He gave all the others to his four children, giving the same number to each. How many chickens did each child receive?

\_\_\_\_\_ 7

8. Mary weighs 85 pounds, Ruth weighs 65 pounds, and Ethel weighs 90 pounds. What is their average weight?

\_\_\_\_\_ 8

9. How many square inches are there in a piece of glass 15 inches wide and 20 inches long?

\_\_\_\_\_ 9

10. How many one inch squares can be placed in the bottom of a box 3 inches wide, 6 inches deep, and 10 inches long?

\_\_\_\_\_ 10

11. At a candy sale, four-fifths of a class brought bags of taffy to school. There were 45 pupils in the class. How many pupils brought taffy?

\_\_\_\_\_ 11

12. Mary paid \$1.75 for a new book, 30 cents for lunch, and 20 cents for carfare. She spent the amount left out of \$5.00 for a new dress. How much did the dress cost?

\_\_\_\_\_ 12

13. Our team has played 12 games and lost 3 of them. What per cent of the games did we lose?

\_\_\_\_\_ 13

14. A bank received seven per cent interest on a loan of \$300.00 for one year. How much interest was received?

\_\_\_\_\_ 14

15. On a map  $\frac{1}{4}$  inch is used to represent 10 miles. The distance between two cities on the map is 2 inches. How many miles apart are they?

\_\_\_\_\_ 15

Sec. C. Score (number right) \_\_\_\_\_

# TEST 4. SEC. D

These are problems in addition. Write your answers under the problems and also on the lines to the right.

(1)  

$$\begin{array}{r} 41 \\ + 32 \\ \hline \end{array}$$

(2)  

$$\begin{array}{r} 40 \\ + 26 \\ \hline \end{array}$$

(3)  

$$\begin{array}{r} 409 \\ + 520 \\ \hline \end{array}$$

(4)  

$$\begin{array}{r} 57 \\ + 6 \\ \hline \end{array}$$

(5)  

$$\begin{array}{r} 34 \\ + 18 \\ \hline \end{array}$$

(6)  

$$\begin{array}{r} 264 \\ + 379 \\ \hline \end{array}$$

(7)  

$$\begin{array}{r} 2317 \\ 6894 \\ 5134 \\ + 6020 \\ \hline \end{array}$$

(8)  

$$\begin{array}{r} \$34.24 \\ 8.65 \\ .55 \\ + 4.26 \\ \hline \end{array}$$

(9)  $\$5.00 + \$6.00 + \$12 + \$2.40 =$

(10)  

$$\begin{array}{r} \frac{1}{2} \\ + \frac{1}{2} \\ \hline \end{array}$$

(11)  

$$\begin{array}{r} \frac{1}{3} \\ + \frac{1}{6} \\ \hline \end{array}$$

(12)  

$$\begin{array}{r} 24 \\ + 3\frac{2}{3} \\ \hline \end{array}$$

(13)  

$$\begin{array}{r} 3\frac{3}{4} \\ + 3\frac{1}{8} \\ \hline \end{array}$$

(14)  

$$\begin{array}{r} 21\frac{1}{3} \\ + 4\frac{1}{4} \\ \hline \end{array}$$

(15)  

$$\begin{array}{r} 5\frac{3}{4} \\ + 3\frac{2}{3} \\ \hline \end{array}$$

(16)  

$$\begin{array}{r} 33\frac{1}{4} \\ 12\frac{1}{2} \\ + 21\frac{2}{3} \\ \hline \end{array}$$

(17)  $3\frac{1}{2} + 6.25 =$

(18)  $.04 + .261 + .3108 =$

(19)  $32.4 + 2.53 + .0627 + 4 =$

(20)  

$$\begin{array}{r} 1 \text{ ft. } 10 \text{ in.} \\ + 1 \text{ ft. } 6 \text{ in.} \\ \hline \end{array}$$

- \_\_\_\_\_ 1
- \_\_\_\_\_ 2
- \_\_\_\_\_ 3
- \_\_\_\_\_ 4
- \_\_\_\_\_ 5
- \_\_\_\_\_ 6
- \_\_\_\_\_ 7
- \_\_\_\_\_ 8
- \_\_\_\_\_ 9
- \_\_\_\_\_ 10
- \_\_\_\_\_ 11
- \_\_\_\_\_ 12
- \_\_\_\_\_ 13
- \_\_\_\_\_ 14
- \_\_\_\_\_ 15
- \_\_\_\_\_ 16
- \_\_\_\_\_ 17
- \_\_\_\_\_ 18
- \_\_\_\_\_ 19
- \_\_\_\_\_ 20

Sec. D. Score (number right) \_\_\_\_\_

## TEST 4. SEC. E

These are problems in subtraction. Write your answers under the problems and also on the lines to the right.

$$\begin{array}{r} (1) \\ 46 \\ -32 \\ \hline \end{array}$$

$$\begin{array}{r} (2) \\ 45 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} (3) \\ 398 \\ -203 \\ \hline \end{array}$$

$$\begin{array}{r} (4) \\ 470 \\ -230 \\ \hline \end{array}$$

$$\begin{array}{r} (5) \\ 45 \\ -18 \\ \hline \end{array}$$

$$\begin{array}{r} (6) \\ 387 \\ -298 \\ \hline \end{array}$$

$$\begin{array}{r} (7) \\ 3703 \\ -1567 \\ \hline \end{array}$$

$$\begin{array}{r} (8) \\ \$24.00 \\ -2.75 \\ \hline \end{array}$$

$$(9) \quad \$56 - \$12.75 =$$

$$\begin{array}{r} (10) \\ \frac{1}{4} \\ -\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} (11) \\ \frac{3}{5} \\ -\frac{1}{5} \\ \hline \end{array}$$

$$\begin{array}{r} (12) \\ \frac{5}{6} \\ -\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} (13) \\ \frac{3}{4} \\ -\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} (14) \\ 5\frac{1}{4} \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} (15) \\ 9 \\ -5\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} (16) \\ 35\frac{1}{3} \\ -12\frac{2}{3} \\ \hline \end{array}$$

$$(17) \quad 50.8 - 6\frac{1}{2} =$$

$$(18) \quad 75.460 - 33.16 =$$

$$(19) \quad 45.05 - 5.0379 =$$

$$(20) \quad \begin{array}{r} 8 \text{ ft. } 5 \text{ in.} \\ -5 \text{ ft. } 10 \text{ in.} \\ \hline \end{array}$$

\_\_\_\_\_ 1

\_\_\_\_\_ 2

\_\_\_\_\_ 3

\_\_\_\_\_ 4

\_\_\_\_\_ 5

\_\_\_\_\_ 6

\_\_\_\_\_ 7

\_\_\_\_\_ 8

\_\_\_\_\_ 9

\_\_\_\_\_ 10

\_\_\_\_\_ 11

\_\_\_\_\_ 12

\_\_\_\_\_ 13

\_\_\_\_\_ 14

\_\_\_\_\_ 15

\_\_\_\_\_ 16

\_\_\_\_\_ 17

\_\_\_\_\_ 18

\_\_\_\_\_ 19

\_\_\_\_\_ 20

Sec. E. Score (number right) \_\_\_\_\_

# TEST 4. SEC. F

These are problems in multiplication. Write your answers under the problems and also on the lines to the right.

$$\begin{array}{r} (1) \\ 432 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} (2) \\ 500 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} (3) \\ 42 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} (4) \\ 45 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} (5) \\ 805 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} (6) \\ 687 \\ \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} (7) \\ 489 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} (8) \\ 500 \\ \times 300 \\ \hline \end{array}$$

$$\begin{array}{r} (9) \\ 3045 \\ \times 504 \\ \hline \end{array}$$

$$(10) \quad 4 \times \frac{1}{2} =$$

$$(11) \quad \frac{1}{4} \times \frac{1}{4} =$$

$$(12) \quad \frac{1}{3} \times \frac{3}{4} =$$

$$(13) \quad \frac{3}{5} \times \frac{5}{6} =$$

$$(14) \quad 6 \times 2\frac{1}{4} =$$

$$(15) \quad 7\frac{3}{4} \times \frac{3}{5} =$$

$$(16) \quad 5\frac{1}{2} \times 7\frac{3}{5} =$$

$$\begin{array}{r} (17) \\ 45\frac{4}{5} \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} (18) \\ 384.6 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} (19) \\ 54.38 \\ \times .0025 \\ \hline \end{array}$$

$$\begin{array}{r} (20) \\ 5 \text{ ft. } 6 \text{ in.} \\ \times 3 \\ \hline \end{array}$$

- \_\_\_\_\_ 1
- \_\_\_\_\_ 2
- \_\_\_\_\_ 3
- \_\_\_\_\_ 4
- \_\_\_\_\_ 5
- \_\_\_\_\_ 6
- \_\_\_\_\_ 7
- \_\_\_\_\_ 8
- \_\_\_\_\_ 9
- \_\_\_\_\_ 10
- \_\_\_\_\_ 11
- \_\_\_\_\_ 12
- \_\_\_\_\_ 13
- \_\_\_\_\_ 14
- \_\_\_\_\_ 15
- \_\_\_\_\_ 16
- \_\_\_\_\_ 17
- \_\_\_\_\_ 18
- \_\_\_\_\_ 19
- \_\_\_\_\_ 20

Sec. F. Score (number right) \_\_\_\_\_

51  
TEST 4. SEC. G

These are problems in division. Write your answers over the problems and also on the lines to the right.

(1)

$$8 \overline{) 16}$$

(2)

$$9 \overline{) 45}$$

(3)

$$5 \overline{) 30}$$

(4)

$$7 \overline{) 357}$$

(5)

$$8 \overline{) 176}$$

(6)

$$5 \overline{) 525}$$

(7)

$$30 \overline{) 360}$$

(8)

$$36 \overline{) 7344}$$

(9)

$$200 \overline{) 8000}$$

(10)

$$54 \overline{) 4892}$$

(11)

$$2 \div \frac{1}{2} =$$

(12)

$$\frac{1}{3} \div 4 =$$

(13)

$$7 \div \frac{3}{4} =$$

(14)

$$\frac{4}{5} \div \frac{4}{5} =$$

(15)

$$\frac{5}{6} \div \frac{1}{3} =$$

(16)

$$4 \frac{1}{8} \div \frac{3}{4} =$$

(17)

$$7 \frac{3}{5} \div 3 \frac{1}{3} =$$

(18)

$$3 \overline{) 92\frac{3}{4}}$$

(19)

$$4 \overline{) 5.04}$$

(20)

$$.04 \overline{) .504}$$

1

2

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4

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Sec. G. Score (number right) \_\_\_\_\_

## TEST 5. SEC. A

**Directions:** In these sentences draw a line under each letter that should be capitalized. Write the capital letters on the lines to the right.

1. spring is here. \_\_\_\_\_ 1
2. does snow fall in winter? \_\_\_\_\_ 2
3. moss, ferns, and trees grow in brazil. \_\_\_\_\_ 3
4. The baby likes bill, mary, and me. \_\_\_\_\_ 4
5. The abbreviation for september is sept. \_\_\_\_\_ 5
6. Last Wednesday miss smith sailed for europe. \_\_\_\_\_ 6
7. Many people travel through the rocky mountains. \_\_\_\_\_ 7
8. Father said, "you may go to the party." \_\_\_\_\_ 8
9. Last tuesday i visited my uncle john. \_\_\_\_\_ 9

Sec. A. Score (number right).....

## TEST 5. SEC. B

**Directions:** In the following story write in the periods (.), commas (,), question marks (?), and quotation marks (" ") that are left out.

Jack wanted a dog He told his father about it.

Jack said Father will you buy a dog

Father said If I buy a dog for you what will you name him

In reply Jack stated that if he had his choice he would name him Spot.

Sec. B. Score (number right).....

## TEST 5. SEC. C

**Directions:** Draw a line under the correct word in each sentence. Write its number on the line to the right.

- Mother (<sup>1</sup> may <sup>2</sup> can) I go out? \_\_\_\_\_
- (<sup>1</sup> Lemme <sup>2</sup> Let me) have the ball. \_\_\_\_\_
- Where (<sup>1</sup> was <sup>2</sup> were) you last night? \_\_\_\_\_
- The book was (<sup>1</sup> took <sup>2</sup> taken) from the shelf. \_\_\_\_\_
- The teacher will (<sup>1</sup> learn <sup>2</sup> teach) us. \_\_\_\_\_
- We (<sup>1</sup> sung <sup>2</sup> sang) the song. \_\_\_\_\_
- She (<sup>1</sup> ate <sup>2</sup> et) her spinach. \_\_\_\_\_
- He (<sup>1</sup> don't <sup>2</sup> doesn't) ride his bicycle. \_\_\_\_\_
- Mother bought the candy for (<sup>1</sup> us <sup>2</sup> we) girls. \_\_\_\_\_
- I (<sup>1</sup> knowed <sup>2</sup> knew) the candy was hard. \_\_\_\_\_

**Directions:** If the statements given below are complete sentences, draw a line under the word YES; if not, draw a line under the word NO.

- 11 The boy went to the play-ground. YES NO
12. When he returns. YES NO
13. She likes to read. YES NO
14. Are they coming? YES NO
15. The man of whom you were speaking. YES NO
16. The speech was given in the lecture room. YES NO
17. Near the source of the river and by the waterfall. YES NO
18. Month by month he continued to advance. YES NO
19. In order to provide the necessities of life. YES NO
20. Calling to his dog and running at top speed after his friends. YES NO

Sec. C. Score (number right).....

## TEST 5. SEC. D

- |           |           |
|-----------|-----------|
| 1. _____  | 16. _____ |
| 2. _____  | 17. _____ |
| 3. _____  | 18. _____ |
| 4. _____  | 19. _____ |
| 5. _____  | 20. _____ |
| 6. _____  | 21. _____ |
| 7. _____  | 22. _____ |
| 8. _____  | 23. _____ |
| 9. _____  | 24. _____ |
| 10. _____ | 25. _____ |
| 11. _____ | 26. _____ |
| 12. _____ | 27. _____ |
| 13. _____ | 28. _____ |
| 14. _____ | 29. _____ |
| 15. _____ | 30. _____ |

Sec. D. Score (number right) \_\_\_\_\_

## TEST 5. SEC. E

SEC. E. SCORE (See Manual) \_\_\_\_\_